

Peroxidase Anti-Peroxidase (PAP) Complexes

Preparation - Peroxidase anti-peroxidase (PAP) is a purified mixture of purified, soluble immunocomplexes averaging three molecules of horseradish peroxidase to two molecules of anti-peroxidase antibodies. The Cappel PAP reagent is prepared by the Sternberger method. Anti-peroxidase antibodies are affinity purified from antiserum by equivalence point precipitation with peroxidase. Washed immunoprecipitate is solubilized at low pH. Excess peroxidase is added and pH neutralized to form soluble PAP complexes. The soluble PAP complexes are purified of excess peroxidase by repeated salt fractionation.

Purified goat, rabbit, and sheep PAP are dialyzed in 0.02M sodium phosphate, 0.14M sodium chloride, pH 7.3, and adjusted to 20 mg/ml, filtered through 0.22 µm filters, vialled and lyophilized. Mouse PAP is in the same buffer, adjusted to 5 mg/ml, filtered, vialled and lyophilized.

Storage - Unless otherwise labeled, PAP products have a shelf-life of a minimum of five years from the original date of manufacture when stored as indicated on the vial labels and product inserts.

Lyophilized PAP should be stored at or below 2-8°C. Reconstituted PAP may be stored only a few days at this temperature. For long term storage at -20°C or lower, PAP may be aliquoted. Avoid repeated freezing and thawing.

Applications - PAP is useful in immunostaining cells and tissues for light and electron microscopy. It may also be used for immunoblot staining and ELISA. The following is an illustration for the PAP method for rabbit PAP:

Advantages - 1. Lower background. 2. Higher sensitivity than using antibodies directly conjugated with peroxidase.

Disadvantages - 1. The PAP procedure requires additional reagents and requires extra steps as compared to direct use of peroxidase conjugated antibodies.

References

1. Sternberger, N.H., et al., J. Histochem. Cytochem., 8, 315 (1970)

55967 0-5°C	PEROXIDASE ANTI-PEROXIDASE POLYCLONAL ANTIBODY PAP Host: goat Form: lyophilized Applications: ELISA; Immunoblotting. Prepared as 20 mg/ml.	1 ml
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59371 0-5°C	PEROXIDASE ANTI-PEROXIDASE POLYCLONAL ANTIBODY PAP Host: mouse Form: lyophilized Applications: ELISA; Immunoblotting. Prepared as 5 mg/ml.	1 ml
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55968 0-5°C	PEROXIDASE ANTI-PEROXIDASE POLYCLONAL ANTIBODY PAP Host: rabbit Form: lyophilized Applications: ELISA; Immunoblotting. Prepared as 20 mg/ml.	1 ml
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55969 0-5°C	PEROXIDASE ANTI-PEROXIDASE POLYCLONAL ANTIBODY PAP Host: sheep Form: lyophilized Applications: ELISA; Immunoblotting. Prepared as 20 mg/ml.	1 ml
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To place an order: (800) 854-0530 fax (800) 334-6999
Outside the U.S.: (714) 545-0100 fax (714) 557-4872

PURIFIED ANTIGENS

- | | |
|--|--|
| <input type="checkbox"/> Red Blood Cells | <input type="checkbox"/> Whole Sera |
| <input type="checkbox"/> Complement Components | <input type="checkbox"/> Tissue Powders |
| <input type="checkbox"/> Liver S9 Homogenates | <input type="checkbox"/> Myeloma Ascites |
| <input type="checkbox"/> Purified Proteins | <input type="checkbox"/> Gamma Globulins |

Preparation - Most products are prepared from blood or other tissues of non-immunized animals. Products derived from human sources are from donors whose serum tested negative by the current FDA required tests. No tests can insure the complete safety of any product. All biomaterials should always be treated as being potentially infectious.

Whole Sera: Whole blood is allowed to clot and all clotted materials are removed. Raw serum is pooled, delipidated, dialyzed into 0.02M sodium phosphate, 0.14M sodium chloride, pH 7.3, filtered, vialled and lyophilized.

Complement Components: They are lyophilized, liquid portions of whole blood prepared at approximately 0°C temperatures. Fresh blood is chilled in ice and cells and debris are removed at ice temperature by centrifugation and filtration. The liquid complement is immediately vialled, frozen and lyophilized.

Purified Proteins and Gamma Globulins: These products are purified using multi-step procedures which include salt fractionation and various chromatographic separations including gel filtration, ion exchange and bioaffinity chromatography. Most products are dialyzed into 0.01M sodium phosphate, 0.07M sodium chloride, pH 7.3. All products are adjusted to standard protein concentration, filtered through 0.22 µm filters and vialled aseptically. All products except human IgM and human fibronectin are lyophilized.

Specifications - Most products are tested for identity and immunochemical purity by immunoelectrophoresis and/or double immunodiffusion. Purified protein may be additionally tested for protein purity using SDS gel electrophoresis, FPLC or HPLC.

Complement Components: These purified antigens are tested in serial dilutions for activity in hemolytic assays. Activity is indicated on the product insert.

Total protein content is measured using the absorbance at 280 nm or the Biuret or other protein assay.

Storage - Unless otherwise noted, Cappel antigens have a shelf-life of a minimum of five years from the original manufacture date. This assumes storage as recommended on the vial labels and product inserts. Unopened, lyophilized products generally should be stored at 2-8°C. Once reconstituted, they may be stored for only a few days at this temperature without preservatives. They may be aliquoted and frozen at -20°C or lower for long term storage. Liquid products such as human IgM and human fibronectin should be stored at 2-8°C. Microbial contamination should be avoided.

Human Antigens

55912 0-5°C	ALBUMIN, HUMAN Purified antigen lyophilized	50 mg
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55883 0-5°C	ALBUMIN, HUMAN Purified antigen lyophilized FITC Conjugated	25 mg
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59414 -20°C	APOLIPOPROTEIN AI Human Purified antigen lyophilized	500 µg
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59415 -20°C	APOLIPOPROTEIN AII Human Purified antigen lyophilized	500 µg
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CATALOG
NUMBER

59416 **APOLIPOPROTEIN B** 500 µg
-20°C **Human**
Purified antigen
lyophilized

59417 **APOLIPOPROTEIN CI** 500 µg
-20°C **Human**
Purified antigen
lyophilized

59418 **APOLIPOPROTEIN CII** 500 µg
-20°C **Human**
Purified antigen
lyophilized

59419 **APOLIPOPROTEIN CIII** 500 µg
-20°C **Human**
Purified antigen
lyophilized

59432 **APOLIPOPROTEIN E** 500 µg
-20°C **Human**
Purified antigen
lyophilized

59653 **APOLIPOPROTEIN H** 500 µg
-20°C **Human**
(β₂-Glycoprotein I)
Purified antigen
lyophilized

55913 **FIBRONECTIN** 1 mg
0-5°C **Human**
Purified antigen
liquid

55838 **γ-GLOBULIN** 100 mg
0-5°C **Human**
Purified antigen
lyophilized

55914 **HEMOGLOBIN** 20 mg
0-5°C **Human**
Purified antigen
lyophilized

55905 **IgA, Secretory** 5 mg
0-5°C **Human**
Purified antigen
lyophilized

55906 **IgA, Serum** 5 mg
0-5°C **Human**
Purified antigen
lyophilized

55907 **IgA_κ MYELOMA** 10 mg
0-5°C **Human**
Purified antigen
lyophilized

CATALOG
NUMBER

55836 **IgG** 1 ml
0-5°C **Human**
Control
Contains no IgA or IgM.
Purified antigen
Packaged as 10 mg/ml.

55908 **IgG** 50 mg
0-5°C **Human**
Purified antigen
lyophilized

55882 **IgG** 25 mg
0-5°C **Human**
FITC Conjugated
Purified antigen
lyophilized

55902 **IgG** 5 mg
0-5°C **Human**
HRP Conjugated
Purified antigen
lyophilized

55959 **IgG-AFFINITY GEL** 2 ml
0-5°C **Human IgG**
This antigen affinity gel is prepared by reaction of purified IgG to activated Sepharose® 4B gel. The washed gel is packaged as a ready-to-use column. The bed volume is 2 ml.
Binding Capacity: 4 mg of IgG.
It is useful for the purification of human antibodies or removal of antibodies cross-reactive with human IgG. The gel buffer is 0.02M sodium phosphate, 0.14M sodium chloride, pH 7.3, with 10% glycerol and 0.05% sodium azide.

55909 **IgG Fab** 10 mg
0-5°C **Human**
Purified antigen
lyophilized

55910 **IgG F(ab')₂** 10 mg
0-5°C **Human**
Purified antigen
lyophilized

55911 **IgG Fc** 10 mg
0-5°C **Human**
Purified antigen
lyophilized

CATALOG NUMBER		
55837 0-5°C	IgM Human Control Contains no IgA or IgM. Purified antigen Packaged as 2 mg/ml. lyophilized	1 ml
55916 0-5°C	IgM Human Purified antigen liquid	5 mg
59391 0-5°C	IMMUNOGLOBULIN STANDARD Human A pool of normal human serum standardized for immunoglobulin concentration by radial immunodiffusion (RID). Serum with 0.2% sodium azide, 0.01% thimerosal, 0.01% benzamidine, and 0.1% ε-aminocaproic acid is vialized and lyophilized. The product is analyzed by RID using ISUS/WHO-standardized materials. Results for IgA ₁ , IgA ₂ , total IgA, IgD, IgG ₁ , IgG ₂ , IgG ₃ , IgG ₄ , total IgG, and IgM are included on the product insert. This product is intended for RID use.	0.5 ml
55839 0-5°C	LACTOFERRIN Human Purified antigen lyophilized	10 mg
59393 0-5°C	LIPOPROTEIN Human Very Low Density Lipoprotein This density range for this preparation of purified VLDL is 1.006-1.019 g/ml.	10 mg
59392 0-5°C	LIPOPROTEIN Human Low Density Lipoprotein This density range for this preparation of purified LDL is 1.019-1.063 g/ml.	10 mg
59433 0-5°C	LIPOPROTEIN Human High Density Lipoprotein This density range for this preparation of purified HDL is 1.063-1.210 g/ml.	10 mg
59602 0-5°C	LIPOPROTEIN(a) Human Purified	100 µg
55833 0-5°C	α₂-MACROGLOBULIN Human Purified antigen lyophilized	5 mg
55840 0-5°C	MYOGLOBIN Human Control Packaged as 1 mg/ml.	1 ml

CATALOG NUMBER		
71990 0-5°C	PLASMINOGEN ACTIVATOR, Tissue-Type (t-PA) Human Prepared from human myeloma cells. It is dialyzed into 0.01M PBS, with 0.01% Tween 80, pH 7.5, then lyophilized. The activity after reconstitution is 40-50 IU/ml. the amount in the 1.0 ml vial is sufficient for 600 t-PA activity assays or 100 t-PA inhibition assays. Ref.: 1. Verheijen, J.H., et al., <i>Thromb. Haemostas.</i> , 48 , 266-269 (1983). 2. Verhijen, J.H., <i>Thromb. Haemostas.</i> , 51 , 392-395 (1984). 3. Gaffney and Curtis, <i>Thromb. Haemostas.</i> , 53 , 134-136 (1985).	1 ml
55915 0-5°C	TRANSFERRIN Human Purified	10 mg
57047 -20°C	TRYPTASE From Human (Lung) Form: Purified Liquid Activity: 5,135 mU/mg A mast cell derived serine protease which has been implicated in the pathophysiology of allergic asthma. Ref.: 1. Smith, T.J, Hougland, MW, Johnson, DA; <i>J. Biol. Chem.</i> 259 (17): 11046-11051 (1984). 2. Schwartz, LB, Lewis, RA, Austen, KF; <i>J. Biol. Chem.</i> 256 (22): 11939-11943 (1981) 3. Schwartz, LB, Bradford, TM; <i>J. Biol. Chem.</i> 261 : 7372-7379 (1986).	10 µg
55979 0-5°C	WHOLE SERUM Human Purified	2 ml
Mouse Antigens		
55941 0-5°C	ALBUMIN, MOUSE Purified antigen lyophilized	25 mg
55858 0-5°C	ALBUMIN, MOUSE Purified Fraction V lyophilized	50 mg
55860 -20°C	COMPLEMENT Mouse liquid	1 ml
55861 0-5°C	γ-GLOBULIN Mouse Purified antigen lyophilized	25 mg

CATALOG
NUMBER

55939 **IgG** 20 mg
0-5°C **Mouse**
Purified antigen
lyophilized

55903 **IgG** 5 mg
0-5°C **Mouse**
HRP Conjugated
Purified antigen
lyophilized

55960 **IgG-AFFINITY GEL** 2 ml
0-5°C **Mouse IgG**
This antigen affinity gel is prepared by reaction of purified IgG to activated Sepharose® 4B gel. The washed gel is packaged as a ready-to-use column. The bed volume is 2 ml.
Binding Capacity: 4 mg of IgG.
It is useful for the purification of human antibodies or removal of antibodies cross-reactive with human IgG. The gel buffer is 0.02M sodium phosphate, 0.14M sodium chloride, pH 7.3, with 10% glycerol and 0.05% sodium azide.

55940 **IgG F(ab')₂** 5 mg
0-5°C **Mouse**
Purified antigen
lyophilized

55862 **LIVER ACETONE POWDER** 5 g
0-5°C **Mouse**
Purified

50339 **MYELOMA ASCITES IgA (λ₂)** 5 mg
0-5°C **[MOPC 315]**
Ascites fluid, collected from Balb/c mice which carry plasmacytomas subcutaneously, is clarified by centrifugation and filtration. It is dialyzed, adjusted to yield at least 5 mg of immunoglobulin, then vialled and lyophilized. Clarified ascites is tested for immunoglobulin by immunoelectrophoresis using antisera specific for the particular type and isotype. Approximately 10% of the total protein is immunoglobulin (including trace levels of the host's immunoglobulins), 80% is albumin, and 10% is complement and other proteins.

50340 **MYELOMA ASCITES IgA (κ)** 5 mg
0-5°C **[TEPC 15]**
Ascites fluid, collected from Balb/c mice which carry plasmacytomas subcutaneously, is clarified by centrifugation and filtration. It is dialyzed, adjusted to yield at least 5 mg of immunoglobulin, then vialled and lyophilized. Clarified ascites is tested for immunoglobulin by immunoelectrophoresis using antisera specific for the particular type and isotype. Approximately 10% of the total protein is immunoglobulin (including trace levels of the host's immunoglobulins), 80% is albumin, and 10% is complement and other proteins.

CATALOG
NUMBER

50341 **MYELOMA ASCITES IgG₁ (κ)** 5 mg
0-5°C **[MOPC 21]**
Ascites fluid, collected from Balb/c mice which carry plasmacytomas subcutaneously, is clarified by centrifugation and filtration. It is dialyzed, adjusted to yield at least 5 mg of immunoglobulin, then vialled and lyophilized. Clarified ascites is tested for immunoglobulin by immunoelectrophoresis using antisera specific for the particular type and isotype. Approximately 10% of the total protein is immunoglobulin (including trace levels of the host's immunoglobulins), 80% is albumin, and 10% is complement and other proteins.

50342 **MYELOMA ASCITES IgG_{2a} (κ)** 5 mg
0-5°C **[UPC 10]**
Ascites fluid, collected from Balb/c mice which carry plasmacytomas subcutaneously, is clarified by centrifugation and filtration. It is dialyzed, adjusted to yield at least 5 mg of immunoglobulin, then vialled and lyophilized. Clarified ascites is tested for immunoglobulin by immunoelectrophoresis using antisera specific for the particular type and isotype. Approximately 10% of the total protein is immunoglobulin (including trace levels of the host's immunoglobulins), 80% is albumin, and 10% is complement and other proteins.

50344 **MYELOMA ASCITES IgG_{2b} (κ)** 5 mg
0-5°C **[MOPC 195]**
Ascites fluid, collected from Balb/c mice which carry plasmacytomas subcutaneously, is clarified by centrifugation and filtration. It is dialyzed, adjusted to yield at least 5 mg of immunoglobulin, then vialled and lyophilized. Clarified ascites is tested for immunoglobulin by immunoelectrophoresis using antisera specific for the particular type and isotype. Approximately 10% of the total protein is immunoglobulin (including trace levels of the host's immunoglobulins), 80% is albumin, and 10% is complement and other proteins.

50345 **MYELOMA ASCITES IgG₃ (κ)** 5 mg
0-5°C **[FLOPC 21]**
Ascites fluid, collected from Balb/c mice which carry plasmacytomas subcutaneously, is clarified by centrifugation and filtration. It is dialyzed, adjusted to yield at least 5 mg of immunoglobulin, then vialled and lyophilized. Clarified ascites is tested for immunoglobulin by immunoelectrophoresis using antisera specific for the particular type and isotype. Approximately 10% of the total protein is immunoglobulin (including trace levels of the host's immunoglobulins), 80% is albumin, and 10% is complement and other proteins.

50346 **MYELOMA ASCITES IgM (λ₁)** 5 mg
0-5°C **[MOPC 104E]**
Ascites fluid, collected from Balb/c mice which carry plasmacytomas subcutaneously, is clarified by centrifugation and filtration. It is dialyzed, adjusted to yield at least 5 mg of immunoglobulin, then vialled and lyophilized. Clarified ascites is tested for immunoglobulin by immunoelectrophoresis using antisera specific for the particular type and isotype. Approximately 10% of the total protein is immunoglobulin (including trace levels of the host's immunoglobulins), 80% is albumin, and 10% is complement and other proteins.

CATALOG NUMBER

50325 MYELOMA PROTEINS IgA (λ_2) 1 mg
[-70°C [MOPC 315]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50326 MYELOMA PROTEINS IgA (κ) 1 mg
[-70°C [TEPC 15]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50327 MYELOMA PROTEINS IgG₁ (κ) 1 mg
[-70°C [MOPC 21]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50328 MYELOMA PROTEINS IgG_{2a} (κ) 1 mg
[-70°C [UPC 10]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50329 MYELOMA PROTEINS IgG_{2a} (κ) 1 mg
[-70°C [RPC 5]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50330 MYELOMA PROTEINS IgG_{2b} (κ) 1 mg
[-70°C [MOPC 195]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50331 MYELOMA PROTEINS IgG_{2b} (κ) 1 mg
[-70°C [MOPC 141]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

CATALOG NUMBER

50332 MYELOMA PROTEINS IgG₃ (κ) 1 mg
[-70°C [FLOPC 21]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50333 MYELOMA PROTEINS IgG₃ (κ) 1 mg
[-70°C [J 606]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50335 MYELOMA PROTEINS IgM (λ_1) 1 mg
[-70°C [MOPC 104E]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

50336 MYELOMA PROTEINS IgM (κ) 1 mg
[-70°C [TEPC 183]]
 This myeloma proteins are purified from ascites by a combination of salt precipitation, ion exchange and bioaffinity chromatography. Purified proteins are dialyzed into 0.02M Tris, 0.14M sodium chloride, pH 8.1. Product is adjusted to 1.0 mg/ml, filtered, vialled, and stored frozen at -70°C. Product are shipped on dry ice.

55943 TRANSFERRIN 10 mg
0-5°C Mouse
 Purified lyophilized

55989 WHOLE SERUM 2 ml
0-5°C Mouse
 Purified lyophilized

Rabbit Antigens

55948 ALBUMIN, RABBIT 50 mg
0-5°C Purified antigen lyophilized

55866 COMPLEMENT 1 ml
0-5°C Rabbit
 Purified lyophilized

CATALOG
NUMBER

55867 0-5°C	γ-GLOBULIN Rabbit Purified lyophilized	100 mg
55944 0-5°C	IgG Rabbit Purified antigen lyophilized	50 mg
55890 0-5°C	IgG Rabbit FITC Conjugated Purified antigen lyophilized	25 mg
55904 0-5°C	IgG Rabbit HRP Conjugated Purified antigen lyophilized	5 mg
55961 0-5°C	IgG AFFINITY GEL Rabbit IgG This antigen affinity gel is prepared by reaction of purified IgG to activated Sepharose® 4B gel. The washed gel is packaged as a ready-to-use column. The bed volume is 2 ml. Binding Capacity: 4 mg of IgG. It is useful for the purification of human antibodies or removal of antibodies cross-reactive with human IgG. The gel buffer is 0.02M sodium phosphate, 0.14M sodium chloride, pH 7.3, with 10% glycerol and 0.05% sodium azide.	2 ml
55946 0-5°C	IgG F(ab')₂ Rabbit Purified antigen lyophilized	10 mg
55891 0-5°C	IgG F(ab')₂ Rabbit FITC Conjugated Purified antigen lyophilized	10 mg
55947 0-5°C	IgG Fc Rabbit Purified antigen lyophilized	5 mg
55868 0-5°C	LIVER ACETONE POWDER Rabbit Purified	10 g
55990 0-5°C	WHOLE SERUM Rabbit Purified lyophilized	2 ml

CATALOG
NUMBER

Rat Antigens

55952 0-5°C	ALBUMIN, RAT Purified antigen lyophilized	25 mg
55869 0-5°C	ALBUMIN, RAT Purified Fraction V lyophilized	50 mg
55870 0-5°C	COMPLEMENT Rat Purified	1 ml
55871 0-5°C	γ-GLOBULIN Rat Purified	50 mg
55951 0-5°C	IgG Rat Purified antigen lyophilized	20 mg
55962 0-5°C	IgG-AFFINITY GEL Rat IgG This antigen affinity gel is prepared by reaction of purified IgG to activated Sepharose® 4B gel. The washed gel is packaged as a ready-to-use column. The bed volume is 2 ml. Binding Capacity: 4 mg of IgG. It is useful for the purification of human antibodies or removal of antibodies cross-reactive with human IgG. The gel buffer is 0.02M sodium phosphate, 0.14M sodium chloride, pH 7.3, with 10% glycerol and 0.05% sodium azide.	2 ml
55872 0-5°C	LIVER ACETONE POWDER Rat Purified	5 g
50411 -70°C	LIVER S9 HOMOGENATE Post Mitochondrial Supernatant Rat Liver S9 Aroclor 1254 Induced Suspended in potassium chloride.	2 ml
50412 -70°C	LIVER S9 HOMOGENATE Post Mitochondrial Supernatant Rat Liver S9 Aroclor 1254 Induced Suspended in potassium chloride.	5 ml
50414 -70°C	LIVER S9 HOMOGENATE Post Mitochondrial Supernatant Rat Liver S9 Aroclor 1254 Induced Suspended in sucrose.	5 ml

CATALOG
NUMBER

NEW
50422
0-5°C **LIVER S9 HOMOGENATE** 2 ml
Post Mitochondrial Supernatant
Rat Liver S9
Aroclor 1254 Induced
Lyophilized.

55953
0-5°C **TRANSFERRIN** 10 mg
Rat
Purified
lyophilized

55991
0-5°C **WHOLE SERUM** 2 ml
Rat
Purified
lyophilized

Additional Antigens

55918
0-5°C **ALBUMIN, BOVINE** 50 mg
Purified antigen
lyophilized

55897
0-5°C **ALBUMIN, BOVINE** 25 mg
Rhodamine Conjugated
Purified antigen
lyophilized

55925
0-5°C **ALBUMIN, DOG** 50 mg
Purified antigen
lyophilized

55934
0-5°C **ALBUMIN, HAMSTER** 25 mg
Purified antigen
lyophilized

55852
0-5°C **COMPLEMENT** 1 ml
Guinea Pig
Purified
lyophilized

55854
0-5°C **COMPLEMENT** 5 ml
Guinea Pig
Purified
lyophilized

55847
0-5°C **γ-GLOBULIN** 100 mg
Bovine
Purified
lyophilized

55851
0-5°C **γ-GLOBULIN** 100 mg
Goat
Purified
lyophilized

CATALOG
NUMBER

55917
0-5°C **IgG** 50 mg
Bovine
Purified antigen
lyophilized

55920
0-5°C **IgG** 20 mg
Chicken
Purified antigen
lyophilized

55924
0-5°C **IgG** 50 mg
Dog
Purified antigen
lyophilized

55926
0-5°C **IgG** 50 mg
Goat
Purified antigen
lyophilized

55888
0-5°C **IgG** 25 mg
Goat
FITC Conjugated
Purified antigen
lyophilized

55929
0-5°C **IgG Fc** 10 mg
Goat
Purified antigen
lyophilized

55933
0-5°C **IgG** 20 mg
Hamster
Purified antigen
lyophilized

55935
0-5°C **IgG** 50 mg
Horse
Purified antigen
lyophilized

55937
0-5°C **IgG** 20 mg
Monkey
Purified antigen
lyophilized

55954
0-5°C **IgG** 50 mg
Sheep
Purified antigen
lyophilized

55876
0-5°C **RED BLOOD CELLS** 20 ml
Sheep
10% Suspension
Washed, preserved red blood cells preserved in a
merthiolate-sodium acetate-boric acid solution.

CATALOG
NUMBER

55875 0-5°C	WHOLE BLOOD Sheep Purified Whole Blood Alsevers contains equal volumes of whole blood and Alsevers solution.	20 ml
55980 0-5°C	WHOLE SERUM Bovine Purified lyophilized	2 ml
55982 0-5°C	WHOLE SERUM Chicken Purified lyophilized	2 ml
55994 0-5°C	WHOLE SERUM Deer Purified lyophilized	2 ml
55983 0-5°C	WHOLE SERUM Dog Purified lyophilized	2 ml
55984 0-5°C	WHOLE SERUM Goat Purified lyophilized	2 ml
55985 0-5°C	WHOLE SERUM Guinea Pig Purified lyophilized	2 ml
55986 0-5°C	WHOLE SERUM Hamster Purified lyophilized	2 ml
55987 0-5°C	WHOLE SERUM Horse Purified lyophilized	2 ml
55988 0-5°C	WHOLE SERUM Monkey Purified lyophilized	2 ml
55992 0-5°C	WHOLE SERUM Sheep Purified lyophilized	2 ml
55993 0-5°C	WHOLE SERUM Swine Purified lyophilized	2 ml

One call. One source.
A world of biomedical products

CATALOG
NUMBER

ACCESSORY REAGENTS

Avidin-Biotin Reagents

Preparation - A special immunochemical grade of chicken egg white avidin is offered. Conjugates are prepared and purified in procedures similar to the procedures used for fluorochrome and enzyme conjugates of antibodies.

Specifications - Fluorochrome conjugated avidin products are tested for appropriate dye to protein ratios. They are tested qualitatively for functional fluorescence. Enzyme conjugated avidin/biotin products are tested for required ELISA titers.

Storage - Alkaline phosphatase and Texas Red™ conjugated avidin are labeled with two-year expiration dates. Other avidin-biotin products have a five year shelf-life from the original manufacture date. This assumes storage as recommended on the vial label and product insert. Unopened liquid products may be stored at 2-8°C. Once opened, they may be stored at this temperature for a few weeks. Glycerol (40% v/v) may be added for long term storage at -20°C or lower and to prevent freezing. Unopened lyophilized products may be stored at 2-8°C. Once reconstituted, they may be stored at this temperature for a few weeks. They may be aliquoted and frozen at -20°C or lower for long term storage. Avoid repeated freeze/thaw cycles.

Applications - Avidin and biotin reagents are used with biotin conjugated antibodies, antibody fragments or other biotinylated materials. Avidin fluorochromes and enzyme conjugates are used as secondary reagents in the labeled-avidin biotin (LAB) technique. Unconjugated avidin and biotin and conjugated label are used sequentially in the bridged-avidin-biotin reagent (BRAB) technique.

Applications using enzyme labeled reagents include enzyme immunoassays (EIA), cell and tissue staining for light and electron microscopy, and blot immunostaining. Applications using fluorochrome reagents include immunofluorescence assays (IFA), cell staining for cell cytometry and fluorescent microscopy, tissue staining for fluorescence microscopy and blot immunostaining.

Advantages - 1. Increased sensitivity versus immunoreactions with directly labeled antibodies. This advantage results from the extremely high association between avidin and biotin (10¹⁵ Molar.), avidin's four binding sites for biotin, and the high number of biotin groups which can be conjugated to an antibody without loss of antibody activity. 2. Less background. Biotin labeled antibodies have fewer non-specific interactions than unlabeled antibodies and labeled avidin exhibits less non-specific binding than unlabeled avidin.

Disadvantages - The LAB and BRAB procedures require more steps and time than the use of directly labeled antibodies.

55827 0-5°C	AVIDIN Liquid in PBS with 0.01% thimerosal.	5 mg
55963 0-5°C	AVIDIN-ALKALINE PHOSPHATASE Liquid in 0.03M Tris buffered saline, pH 8.0, with 1% BSA, 10% glycerol, and 0.05% sodium azide.	1 mg
55880 0-5°C	AVIDIN-FITC Liquid in 0.02M PBS, pH 7.3, with 10% glycerol and 0.05% sodium azide.	5 mg
55898 0-5°C	AVIDIN-HRP Liquid in 0.02M PBS, pH 7.3, with 10% glycerol and 0.01% thimerosal.	5 mg
55894 0-5°C	AVIDIN-TEXAS RED Liquid in 0.02M PBS, pH 7.3, with 10% glycerol and 0.05% sodium azide.	5 mg

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