

Native Human IgM protein ab91117

3 References 1 Image

Description

Product name	Native Human IgM protein
Purity	> 95 % SDS-PAGE.
Expression system	Native
Accession	<u>P01871</u>
Protein length	Full length protein
Animal free	No
Nature	Native
Species	Human
Sequence	GSASAPTLFPLVSCENSPSDTSSVAVGCLAQDFLPDSITF SWKYKNNSDI SSTRGFPSVLRRGGKYAATSQVLLPSKDVMQGTDEHVVCK VQHPNGNKEKN VPLPVIAELPPKVSFVPPRDGFFGNPRKSKLICQATGFS PRQIQVSWLR EGKQVGSGVTDDQVQAEAKESGPTTYKVTSTLTIKESDWL GQSMFTCRVD HRGLTFQQNASSMCVPDQDTAIRVFAIPPSFASIFLTKSTK LTCLVTDLT TYDSVTISWTRQNGEAVKTHTNISESHPNATFSAVGEASIC EDDWNSGER FTCTVTHDLPSPKQTISRPKGVALHRPDVYLLPPAREQL NLRESATIT CLVTGFSPADVFFVQWMQRGQPLSPEKYVTSAPMPEPQA PGRYFAHSILTV SEEEWNTGETYTCVVAHEALPNRVTERTVDKSTGKPTLY NVSLVMSDTAG TCY
Predicted molecular weight	950 kDa

Specifications

Our **Abpromise guarantee** covers the use of **ab91117** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Liquid
Additional notes	<p>ab91117 is IgM purified from normal plasma. For IgM purified from myeloma plasma, please refer to ab90348.</p> <p>Protein Determination: Extinction Coefficient (E) 0.1% at 280nm, 1cm pathway = 1.18. Prepared from plasma shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.</p>

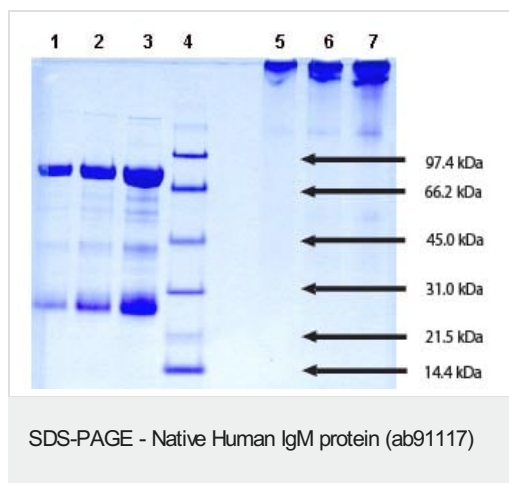
Preparation and Storage

Stability and Storage	<p>Shipped on Dry Ice. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.</p> <p>pH: 8.00</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.605% Tris, 1.16% Sodium chloride</p>
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General Info

Relevance	<p>IgM normally constitutes about 10% of serum immunoglobulins. IgM antibody is prominent in early immune responses to most antigens and predominates in certain antibody responses such as 'natural' blood group antibodies. IgM (with IgD) is the major immunoglobulin expressed on the surface of B cells. The gene for the mu constant region contains four domains separated by short intervening sequences. Class specific anti immunoglobulin antibodies are useful for: The characterization of malignant B cell proliferations. All but acute lymphocytic leukemias share either surface or intra cytoplasmic Ig with an isotypic restriction, which suggest the monoclonal nature of the cell population. Most of the chronic lymphocytic leukemias, non Hodgkin lymphomas and Burkitt's lymphoma bear surface IgM, whereas plasmocytes from Waldenström's disease bear intracytoplasmic IgM. The other isotypes are less frequently found. On the other hand multiple myelomas are usually of the IgG or IgA type. Characterization of plasma cells in inflammatory conditions: Plasma cell typing can be of use for the classification of intestinal inflammatory conditions such as inflammatory bowel disease and allergic conditions. In the latter a specific increase in the number of IgE plasma cells can be demonstrated.</p>
Cellular localization	<p>Isoform 1: Secreted. During differentiation, B lymphocytes switch from expression of membrane bound IgM to secretion of IgM. Isoform 2: Cell membrane; Single pass type I membrane protein.</p>

Images



SDS-PAGE: 4-12% Bis-Tris gel

Lane 1. 5 μ g IgM (reduced/heated)

Lane 2. 10 μ g IgM (reduced/heated)

Lane 3. 20 μ g IgM (reduced/heated)

Lane 4. Molecular weight markers

Lane 5. 5 μ g IgM (non-reduced/no heat)

Lane 6. 10 μ g IgM (non-reduced/no heat)

Lane 7. 20 μ g IgM (non-reduced/no heat)

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