# abcam

# Product datasheet

# Native Human IgM protein ab90348

### 1 Image

**Description** 

Product name Native Human IgM protein

Purity > 95 % SDS-PAGE.

Expression system Native

Protein length Full length protein

Animal free No
Nature Native

Species Human

Predicted molecular weight 950 kDa

#### **Specifications**

Our Abpromise guarantee covers the use of ab90348 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 Human myeloma plasma protein.

Protein Determination: Extinction Coefficient (E) 0.1% at 280nm = 1.18.

Prepared from myeloma plasma shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and

negative for anti-HIV 1 & 2 by FDA approved tests.

#### **Preparation and Storage**

Stability and Storage Shipped on Dry Ice. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.

pH: 8.00

Preservative: 0.05% Sodium azide

Constituents: 0.79% Tris HCI, 1.16% Sodium chloride

#### **General Info**

1

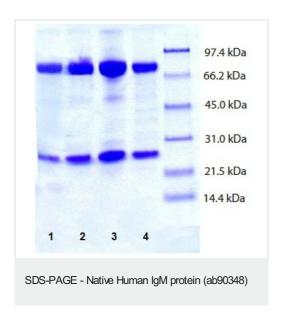
#### Relevance

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.

#### **Cellular localization**

lsoform 1: Secreted. During differentiation, B lymphocytes switch from expression of membrane bound lgM to secretion of lgM. Isoform 2: Cell membrane; Single pass type I membrane protein.

#### **Images**



SDS-PAGE (reduced/heated) analysis of ab90348. Lane 1

- 5μg, Lane 2 - 10μg, Lane 3 - 20μg, Lane 4 - 10μg.

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