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Rat IgM

Catalog # ASR2575

Product Information

Description	RAT IgM whole molecule
Conjugate	Unconjugated
Physical State	Liquid (sterile filtered)
Host Isotype	IgM
Buffer	0.1 M Tris Chloride, 0.5 M Sodium Chloride, pH 8.0
Species of Origin	Rat
Preservative	0.1% (w/v) Sodium Azide

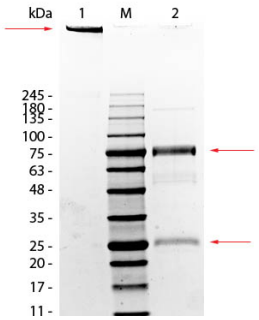
Additional Information

Shipping Condition	Wet Ice
Application Note	Rat IgM whole molecule can be utilized as a control or standard reagent in Western Blotting and ELISA experiments.
Purity	Rat IgM whole molecule was prepared from normal serum by a multi-step process which includes delipidation, selective precipitation and tandem molecular sieve chromatography followed by extensive dialysis against the buffer stated above. Rat IgM whole molecule assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Rat Serum and anti-Rat IgM (chain specific). No reaction was observed against anti-Rat IgG F(c). Some light chain cross-reactivity will occur with anti-Rat IgG.
Storage Condition	Store vial at 4° C prior to opening. Rat IgM whole molecule is stable 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage mix with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.
Precautions Note	This product is for research use only and is not intended for therapeutic or diagnostic applications.

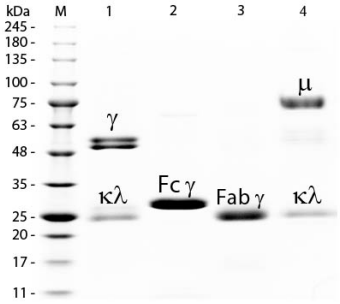
Background

Immunoglobulin M is the largest antibody isotype and the first to be secrected against an initial exposure to antigen. IgM is predominantly produced in the spleen. Formed from covalently linking 5 immunoglobulins together, the approixmate molecular weight of IgM is 900kDa and possesses 10 binding sites (though due to the size of most antigens, not all sites are capable of binding at once). Due to this large size, IgM is typically isolated to the serum.

Images



SDS-Page of Rat IgM Whole Molecule. Lane 1: Rat IgM, Non-Reduced. Lane 2: Rat IgM, Reduced. Load: 1.0 µg per lane. Predicted/Observed size-Predicted/Observed size - Non-Reduced: 900 kDa (Pentamer), 900 kDa (Molecule larger than can pass through gel), Reduced: 78 and 25 kDa, 78 and 25 kDa.



SDS-PAGE of Rat IgM Whole Molecule (p/n ASR2575).
Lane M: 3 µL Opal Prestained Marker (p/n MB-210-0500).
Lane 1: Reduced Rat IgG Whole Molecule (p/n 012-0102).
Lane 2: Reduced Rat IgG F(c) Fragment (p/n 012-0103).
Lane 3: Reduced Rat IgG F(ab) Fragment (p/n 012-0105).
Lane 4: Reduced Rat IgM Whole Molecule (p/n ASR2575).
Load: 1 µg of IgG, F(c), F(ab); 1.5 µg of IgM.
Predicted/Observed size: IgG at 55 and 25 kDa; F(c) at 25 kDa; F(ab) at 25 kDa; IgM at 78 and 25 kDa. Observed F(c) Fragment migrates slightly higher.