ARG81104
Mouse IgM ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG81104 Mouse IgM ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse IgM in serum, plasma, hybridoma cell supernatants and ascites.
Tested Reactivity	Ms
Tested Application	ELISA
Target Name	IgM
Conjugation	HRP
Conjugation Note	TMB substrate is used for color development at 450 nm.
Sample Type	Serum, plasma, hybridoma cell supernatants and ascites
Standard Range	0.5 - 500 ng/ml
Alternate Names	MU; VH; AGM1; Igm; muH; Igh6; Igh-6; Igh-M; Immunoglobulin M

Properties

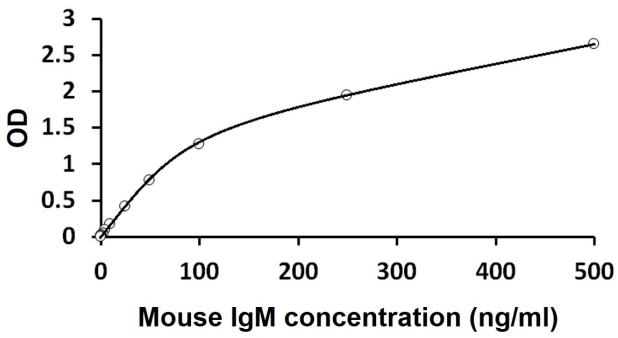
Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 16019 Mouse
Gene Symbol	Ighm
Gene Full Name	immunoglobulin heavy constant mu
Background	Immunoglobulins (Ig) are the antigen recognition molecules of B cells. An Ig molecule is made up of 2 identical heavy chains and 2 identical light chains (see MIM 147200) joined by disulfide bonds so that each heavy chain is linked to a light chain and the 2 heavy chains are linked together. Each Ig heavy chain has an N-terminal variable (V) region containing the antigen-binding site and a C-terminal constant (C) region, encoded by an individual C region gene, that determines the isotype of the antibody and provides effector or signaling functions. The heavy chain V region is encoded by 1 each of 3 types of genes: V genes (see MIM 147070), joining (J) genes (see MIM 147010), and diversity (D) genes (see MIM 146910). The C region genes are clustered downstream of the V region genes within the heavy chain locus on chromosome 14. The IGHM gene encodes the C region of the mu heavy chain, which defines the IgM isotype. Naive B cells express the transmembrane forms of IgM and IgD (see IGHD; MIM 1471770) on their surface. During an antibody response, activated B cells can switch to the expression of individual downstream heavy chain C region genes by a process of somatic recombination known as isotype switching. In addition, secreted Ig forms that act as antibodies can be produced by alternative RNA processing of the heavy chain C region sequences. Although the membrane forms of all Ig isotypes are monomeric, secreted IgM forms pentamers, and occasionally hexamers, in plasma (summary by Janeway et al., 2005).[supplied by OMIM, Aug 2010]

Function	IgM antibodies play an important role in primary defense mechanisms. They have been shown to be involved in early recognition of external invaders like bacteria and viruses, cellular waste and modified self, as well as in recognition and elimination of precancerous and cancerous lesions. The membrane-bound form is found in the majority of normal B-cells alongside with IgD. Membrane-bound IgM induces the phosphorylation of CD79A and CD79B by the Src family of protein tyrosine kinases. It may cause death of cells by apoptosis. It is also found in soluble form, which represents about 30% of the total serum immunoglobulins where it is found almost exclusively as a homopentamer. After the antigen binds to the B-cell receptor, the secreted form is secreted in large amounts. [UniProt]
Highlight	Related products: IgM antibodies; IgM ELISA Kits; IgM Duos / Panels; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
Research Area	Immune System kit

Images



ARG81104 Mouse IgM ELISA Kit standard curve image

ARG81104 Mouse IgM ELISA Kit results of a typical standard run with optical density reading at 450 nm.