

### OriGene Technologies, Inc.

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# Product datasheet for TA377394S

### **IGHM Rabbit Polyclonal Antibody**

## **Product data:**

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	WB,1:500 - 1:1000 ELISA,Recommended starting concentration is 1 $\mu$ g/mL. Please optimize the concentration based on your specific assay requirements.
Reactivity:	Human
Modifications:	Unmodified
Host:	Rabbit
lsotype:	IgG
Clonality:	Polyclonal
Formulation:	Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	49kDa
Gene Name:	immunoglobulin heavy constant mu
Database Link:	<u>Entrez Gene 3507 Human</u> <u>P01871</u>



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#### **GRIGENE** IGHM Rabbit Polyclonal Antibody – TA377394S

#### 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 antigenbinding 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).

#### **Product images:**



Western blot analysis of lysates from Raji cells

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