## For Research Use Only

# human IgM Monoclonal antibody

Catalog Number:66484-1-lg 3 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 66484-1-lg BC009851

ccession Number: Purification Method: Protein G purification

 Concentration:
 GeneID (NCBI):
 CloneNo.:

 1500 ug/ml
 3507
 2D10B10

 Source:
 Full Name:
 Recommended Dilutions:

 Mouse
 immunoglobulin heavy constant mu
 WB 1:5000-1:20000

 Isotype:
 Calculated MW:
 IHC 1:2000-1:6000

 IgG1
 69 kDa
 IF-P 1:200-1:800

Immunogen Catalog Number: Observed MW: AG1459 75 kDa

**Applications** 

Tested Applications: WB, IHC, IF-P, ELISA Cited Applications:

WB, IHC, IF
Species Specificity:

human
Cited Species:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

WB: Human plasma tissue,

IHC: human tonsillitis tissue, human lymphoma tissue
IF-P: human tonsillitis tissue, human appendicitis

tissue

## **Background Information**

IGHM is the constant region of heavy chain of IgM. IgM is the first immunoglobulin expressed during B cell development. IgM antibodies play an important role in primary immune response 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  $\,\mu$  heavy chain disease is a rare lymphoproliferative disorder. Human immunoglobulin heavy chain locus translocations are associated with leukaemias and lymphomas, including multiple myeloma, mantle cell lymphoma, Burkitt's lymphoma and diffuse large B cell lymphoma. This antibody detects the heavy chain of human IgM (~75 kDa).

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Han Liu	36106364	Adv Sci (Weinh)	IF
Anne Kathrin Wessig	35296708	Sci Rep	WB
Haishi Zheng	37933335	J Inflamm Res	IHC

Storage

Storage

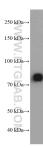
Store at -20°C. Stable for one year after shipment.

Storage Buffer

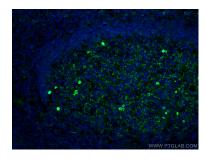
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

### Selected Validation Data



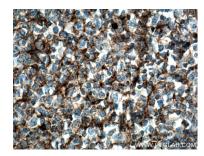
0.1  $\,\mu$  L human plasma was subjected to SDS PAGE followed by western blot with 66484-1-1g (IGHM antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using human IgM antibody (66484-1-Ig, Clone: 2D10B10) at dilution of 1:400 and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



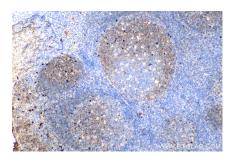
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66484-1-Ig (IGHM antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



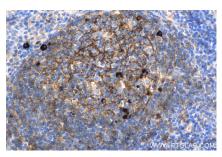
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66484-1-Ig (IGHM antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66484-1-Ig (IGHM antibody) at dilution of 1:1000 (under 4x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



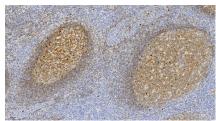
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66484-1-Ig (human IgM antibody) at dilution of 1200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



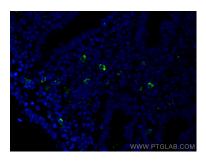
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66484-1-Ig (human IgM antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

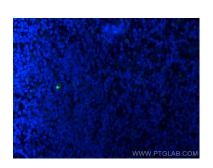


Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66484-1-1g (human IgM antibody) at dilution of 1:3200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66484-1-lg (human IgM antibody) at dilution of 1:3200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).





Immunofluorescent analysis of (4% PFA) fixed human appendicitis tissue using human IgM antibody (66484-1-Ig, Clone: 2D10B10) at dilution of 1:400 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L).

Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human appendicitis tissue using human IgM antibody (66484-1-Ig, Clone: 2D10B10) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).