

CD 38 (HIT2)

Format	Catalog no.	Pack size	Dilution
Concentrated	GB 038 A,B,C	0.1,0.5, 1.0 mL	1:100
Prediluted	GB 038 AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

CD38 (HIT2) is a monoclonal antibody derived from a mouse. The antibody is generated by immunizing mice with the CD38 antigen, followed by the production of hybridoma cells that produce the monoclonal antibody. These hybridomas are then cultured to generate large quantities of the antibody for diagnostic use.

The clone of this monoclonal antibody is HIT2. The HIT2 clone is widely used in various applications, particularly in flow cytometry and immunohistochemistry (IHC), to identify CD38-positive cells.

The isotype of CD38 (HIT2) is IgG1. This is a common isotype for mouse-derived monoclonal antibodies, which is often used for its strong binding affinity and effectiveness in diagnostic assays such as IHC and flow cytometry.

INTENDED USE -

Intended for In Vitro Diagnostic Applications

CD38 (HIT2) is a mouse monoclonal antibody that is intended for professional laboratory use after the initial diagnosis of tumor has been made by conventional histopathology using nonimmunologic histochemical stains, in the qualitative identification of CD38 (HIT2) protein by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist as an aid in making any other clinical determinations

SUMMARY AND EXPLANATION -

CD38 (HIT2) is a monoclonal antibody derived from a mouse. The antibody is generated by immunizing mice with the CD38 antigen, followed by the production of hybridoma cells that produce the monoclonal antibody. These hybridomas are then cultured to generate large quantities of the antibody for diagnostic use.

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PRINCIPLE OF PROCEDURE -

This antibody product may be used as the primary antibody in immunohistochemistry testing of formalin-fixed, paraffin-embedded tissue sections. In general, immunohistochemical (IHC) staining techniques allow for the visualization of antigens via the sequential application of a specific antibody to the antigen (primary antibody), a secondary antibody to the primary antibody (optional link antibody/probe), an enzyme complex and a chromogenic substrate with interposed washing steps. The enzymatic activation of the chromogen results in a visible reaction product at the antigen site. The specimen may then be counterstained, and cover slipped. Results are interpreted using a light microscope and aid in the differential diagnosis of pathophysiological processes, which may or may not be associated with a particular antigen.

SOURCE -: Mouse monoclonal

SPECIES REACTIVITY - Human

CLONE- HIT2

ISOTYPE- IgG1

PROTEIN CONCENTRATION - Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - Extracellular domain of **CD38**, a transmembrane glycoprotein involved in calcium signaling, NAD⁺ metabolism, and immune cell activation.

CELLULAR LOCALISATION - Cell surface, particularly on **plasma cells, activated T and B cells, monocytes, dendritic cells, endothelial cells, and neurons.**

POSITIVE TISSUE CONTROL - **Plasma cells** (bone marrow, lymph nodes), **multiple myeloma, activated T and B cells** (lymphoid tissues), **endothelial cells, monocytes, and dendritic cells.**

KNOWN APPLICATIONS- Immunohistochemistry

30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffer with protein carrier and preservative

STORAGE AND STABILITY -

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C

Materials required but not provided -

- 1) Positive tissue control - **Plasma cells** (bone marrow, lymph nodes), **multiple myeloma**, **normal bone marrow**, and **epithelial tissues** (kidney, intestinal epithelium).
- 2) Negative control tissue(internal or external)
- 3) Microscope slides and coverslips
- 4) Staining jars or baths
- 5) Timer
- 6) Xylene or xylene substitute
- 7) Ethanol or reagent alcohol
- 8) Deionized or distilled water
- 9) Heating equipment or enzyme for tissue pretreatment step
- 10)Detection system
- 11)Chromogen
- 12)Wash buffer
- 13)Hematoxylin
- 14)Antibody diluents
- 15)Peroxide block
- 16)Light microscope
- 17)Mounting medium

LIMITATIONS -

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.

