

Human Granzyme H Antibody

Monoclonal Mouse IgG_{2B} Clone # 185813 Catalog Number: MAB1377

Species Reactivity	Human	
Specificity	Detects human Granzyme H in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse (rm) Granzyme D or rmGranzyme G is observed.	
Source	Monoclonal Mouse IgG _{2B} Clone # 185813	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Granzyme H Glu19-Leu246 Accession # P20718	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	Recombinant Human Granzyme H (Catalog # 1377-SE)

PREPARATION AND STORAGE			
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.		

BACKGROUND

Granzyme H is a member of the granzyme family of serine proteases found specifically in the cytotoxic granules of cytotoxic T lymphocytes (CTL) and natural killer (NK) cells (1, 2). Granzyme H's functions are largely unknown. The more abundant expression of Granzyme H than Granzyme B in NK cells suggests that Granzyme H may complement the pro-apoptotic function of Granzyme B in this cell type (3). Human Granzyme H shows the highest amino acid identity (71%) to mouse Granzyme C (4). Human Granzyme H is synthesized as a precursor (246 residues) with a signal peptide (residues 1-18), a propeptide (residues 19-20) and a mature chain (residues 21-246) (5-7). After being activated by active cathepsin C, human Granzyme H cleaves a thioester substrate (8).

References:

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- 3. Sedelies, K.A. et al. (2004) J. Biol. Chem. 279:26581.
- 4. Sattar, R. et al. (2003) Biochem. Biophys. Res. Comm. 308:726.
- 5. Meier, M. et al. (1990) Biochemistry 29:4042.
- 6. Haddad, P. et al. (1991) Int. Immunol. 3:57.
- 7. Klein, J.L. et al. (1990) Tissue Antigens 35:220.
- 8. Edwards, K.M. et al. (1999) J. Biol. Chem. 274:30468.



