ARG22536
anti-Granzyme A antibody [GA6]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [GA6] recognizes Granzyme A This antibody recognizes Granzyme A, a ~60 kDa disulphide-linked homodimeric protein of two 262 amino acid chains, expressed in cytoplasmic granules of cytotoxic lymphocytes and NK cells.Granzyme A is involved in the induction of apoptosis via its activity as a serine protease, but this would seem to be subsidiary to the role of Granzyme B. Granzyme A deficient mice are indistinguishable from normal animals in their response to infection.Granzyme A has been proposed as a potential biomarker for patients with active tuberculosis with significantly lower levels present in the plasma of patients with the active form of the disease compared to patients with latent infection (Guggino et al. 2015)
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	GA6
Isotype	IgG1
Target Name	Granzyme A
Species	Human
Immunogen	Recombinant human Granzyme A.
Conjugation	Un-conjugated
Alternate Names	EC 3.4.21.78; in-1; CTLA3; CTL tryptase; Granzyme A; Hanukkah factor; Cytotoxic T-lymphocyte proteinase 1; H factor; HFSP; HF; Granzyme-1

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:200
WB	Assay-dependent

Application Note: IHC-P: This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide

Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	GZMA
Gene Full Name	granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3)
Background	Cytolytic T lymphocytes (CTL) and natural killer (NK) cells share the remarkable ability to recognize, bind, and lyse specific target cells. They are thought to protect their host by lysing cells bearing on their surface 'nonself' antigens, usually peptides or proteins resulting from infection by intracellular pathogens. The protein described here is a T cell- and natural killer cell-specific serine protease that may function as a common component necessary for lysis of target cells by cytotoxic T lymphocytes and natural killer cells. [provided by RefSeq, Jul 2008]
Function	Abundant protease in the cytosolic granules of cytotoxic T-cells and NK-cells which activates caspase-independent cell death with morphological features of apoptosis when delivered into the target cell through the immunological synapse. It cleaves after Lys or Arg. Cleaves APEX1 after 'Lys-31' and destroys its oxidative repair activity. Cleaves the nucleosome assembly protein SET after 'Lys-189', which disrupts its nucleosome assembly activity and allows the SET complex to translocate into the nucleus to nick and degrade the DNA. [UniProt]
Calculated Mw	29 kDa