Mouse Fas/TNFRSF6/CD95 Antibody

Monoclonal Rat IgG_{2B} Clone # 169732

Catalog Number: MAB435

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Fas in direct ELISAs. In ELISAs, does not cross-react with recombinant mouse (rm) 4-1BB, rmBAFF R, rmCD27, rmCD30, rmCD40, rmDR3, recombinant human (rh) DR6, rmEDAR, rhFas, rmGITR, rhHVEM, rmLymphotoxin βR, rmOsteoprotegerin, rmOX40, rmRANK, or rmTROY.
Source	Monoclonal Rat IgG_{2B} Clone # 169732
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant mouse Fas/TNFRSF6/CD95 Gln22-Arg169 (predicted) Accession # P25446
Formulation	Lyophilized from a 0.2 μm filtered solution in with Trehalose. See Certificate of Analysis for details.

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
Flow Cytometry	2.5 µg/10^6 cells	Mouse splenocytes

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.
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 from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

BACKGROUND

Fas, also known as APO-1, CD95, and TNFRSF6, was originally identified as a cell-surface protein which binds to monoclonal antibodies that were cytolytic for various human cell lines. In the TNF receptor superfamily nomenclature, Fas is referred to as TNFRSF6. Human and mouse Fas cDNAs encode a 325 and a 327 amino acid residue type 1 membrane protein, respectively, that belongs to the TNF and NGF receptor family. Alternatively spliced cDNAs encoding multiple human Fas isoforms, including a soluble form of Fas lacking the transmembrane domain, have also been identified. Fas is highly expressed in epithelial cells, hepatocytes, activated mature lymphocytes, virus-transformed lymphocytes and other tumor cells. Fas expression has also been detected in mouse thymus, liver, heart, lung, kidney and ovary. The ligand for Fas (FasL) has been identified and shown to be a member of the TNF family of type 2 membrane proteins. FasL is predominantly expressed by activated T-lymphocytes, NK cells, and in tissues with immune-privileged sites. Soluble FasL can be produced by proteolysis of membrane-associated Fas.

Ligation of Fas by FasL or anti-Fas antibody has been shown to induce apoptotic cell death in Fas-bearing cells. Fas plays a role in the down-regulation of the immune reaction and has been shown to be a key mediator of activation-induced death of activated T lymphocytes. Fas-mediated cell death has also been shown to be important for the deletion of activated or autoreactive B lymphocytes. Besides the perforin/granzyme-based mechanism, the Fas system has been identified as the alternate pathway for CTL-mediated cytotoxicity. FasL has also been shown to function in immunological privileged sites by killing infiltrating Fas-bearing lymphocytes and inflammatory cells.

References:

1. Nagata, S. and P. Golstein (1995) Science **267**:1449.
2. Nagata, S. (1997) Cell **88**:355.
3. Parijs, L. and A.K. Abbas (1996) Current Opinion in Immunol. **8**:355.
4. Green, D.R. and C.F. Ware (1997) Proc. Natl. Acad. Sci. USA **94**:5986.