Anti-Human FAS Ligand, soluble

20150223ML

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	**102-P120G**
Size:	100 µg
Lot. No.:	According to product label

Preparation: Produced from sera of goats pre-immunized with highly pure (>98%) recombinant hFasL/Apo1L (human FAS Ligand/Apo1 Ligand). Anti-hFasL/Apo1L specific antibody was purified by affinity chromatography employing immobilized hFasL/Apo1L matrix.

Target Background

Synonyms (Target):	FASLG; FASL; CD178; CD95L; CD95-L; TNFSF6; APT1LG1

Fas Ligand (FasL), also known as CD178, CD95L, or TNFSF6, is a 40 kDa type II transmembrane member of the TNF superfamily of proteins. Its ability to induce apoptosis in target cells plays an important role in the development, homeostasis, and function of the immune system. Mature human Fas Ligand consists of a 179 amino acid (aa) extracellular domain (ECD), a 22 aa transmembrane segment, and a 80 aa cytoplasmic domain. Within the ECD, human Fas Ligand shares 81% and 78% aa sequence identity with mouse and rat Fas Ligand, respectively. Both mouse and human Fas Ligand are active on mouse and human cells. Fas Ligand is expressed on the cell surface as a nondisulfidelinked homotrimer on activated CD4+ Th1 cells, CD8+ cytotoxic T cells, and NK cells. Fas Ligand binding to Fas/CD95 on an adjacent cell triggers apoptosis in the Fas expressing cell. Fas Ligand also binds DcR3 which is a soluble decoy receptor that interferes with Fas Ligandinduced apoptosis. Fas Ligand can be released from the cell surface by metalloproteinases as a 26 kDa soluble molecule which remains trimeric. Shed Fas Ligand retains the ability to bind Fas, although its ability to trigger apoptosis is dramatically reduced. In the absence of TGFβ, however, Fas Ligand/Fas interactions instead promote neutrophilmediated inflammatory responses. Fas Ligand itself transmits reverse signals that costimulate the proliferation of freshly antigenstimulated T cells. Fas Ligandinduced apoptosis plays a central role in the development of immune tolerance and the maintance of immune privileged sites.

Database References Target

Protein RefSeq:	NP_002980
Uniprot ID:	P48023
mRNA RefSeq:	NM_000639.1

Product Specifications

Species reactivity	Human
Clone/Ab feature	Goat IgG
Cross reactivity	Human
Host	Goat
Clonality	Polyclonal Antibody
Purification	Antigen-affinity purified
Immunogen	recombinant Human sFas Ligand
Formulation	lyophilized from PBS
Reconstitution buffer	water

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Neutralization: To yield one-half maximal inhibition [ND50] of the biological activity of FasL/Apo1L (10 ng/ml), a concentration of 0.08 - 0.1 µg/ml of this antibody is required.

Western Blot: To detect hFasL/Apo1L by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant hFasL/Apo1L is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

ELISA:
Indirect: To detect hFasL/Apo1L by indirect ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant hFasL/Apo1L.
Sandwich: To detect hFasL/Apo1L by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant hFasL/Apo1L

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!