10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Trail Antibody

Catalog # ASC10008

Product Information

Application	WB, E, IHC-P
Primary Accession	P50591
Other Accession	NP_003801, 4507593
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	32509
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TRAIL antibody can be used for detection of TRAIL by Western blot at 1 g/mL dilution. Antibody can also be used for immunohistochemistry starting at 20 g/mL.

Additional Information

Gene ID	8743
Other Names	Trail Antibody: TL2, APO2L, CD253, TRAIL, Apo-2L, Tumor necrosis factor ligand superfamily member 10, Apo-2 ligand, tumor necrosis factor (ligand) superfamily, member 10
Target/Specificity	TNFSF10;
Reconstitution & Storage	Trail antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Trail Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TNFSF10
Synonyms	APO2L, TRAIL
Function	Cytokine that binds to TNFRSF10A/TRAILR1, TNFRSF10B/TRAILR2, TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4 and possibly also to TNFRSF11B/OPG (PubMed:10549288, PubMed:26457518). Induces apoptosis. Its activity may be modulated by binding to the decoy receptors TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4 and TNFRSF11B/OPG that cannot induce apoptosis.

Cellular Location	Cell membrane; Single-pass type II membrane protein. Secreted. Note=Exists both as membrane-bound and soluble form.
Tissue Location	Widespread; most predominant in spleen, lung and prostate

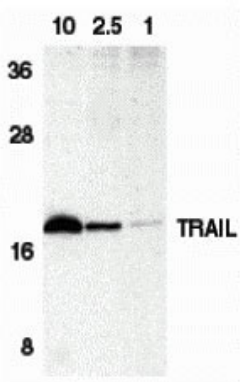
Background

Trail Antibody: Apoptosis, or programmed cell death, occurs during normal cellular differentiation and development of multicellular organisms. Apoptosis is induced by certain cytokines including TNF and Fas ligand in the TNF family through their death domain containing receptors, TNFR1 and Fas. TRAIL (TNF-related apoptosis-inducing ligand) is a type II membrane protein and expressed in a variety of human tissues (1,2). The death domain containing receptors DR4 and DR5 have been identified as the receptor for TRAIL (3-6). Like TNF and Fas ligand, TRAIL induces apoptosis and NF-κB activation in many tissues and cells.

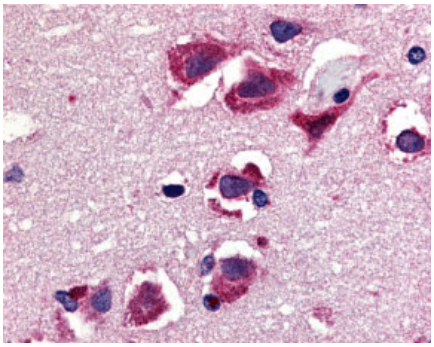
References

Wiley SR, Schooley K, Smolak PJ, et al. Identification and characterization of a new member of the TNF family that induces apoptosis. Immunity 1995; 3:673-82.
Pitti RM, Marsters SA, Ruppert S, et al. Induction of apoptosis by Apo-2 ligand, a new member of the tumor necrosis factor cytokine family. J. Biol. Chem. 1996; 271:12687-90.
Pan G, O'Rourke K, Chinnaiyan AM, et al. The receptor for the cytotoxic ligand TRAIL. Science; 1997; 276:111-3.
Schneider P, Thome M, Burns K, et al. TRAIL receptors 1 (DR4) and 2 (DR5) signal FADD-dependent apoptosis and activate NF-κB. Immunity 1997; 7:831-6.

Images



Western blot analysis of TRAIL in HeLa cell lysate containing 10, 2.5, or 1 ng of recombinant protein containing extracellular domain of TRAIL with TRAIL antibody at 1 µg/mL.



Immunohistochemistry of TRAIL in human brain tissue with TRAIL antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.