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DR5 Antibody

Catalog # ASC10040

Product Information

Application	WB, IF, ICC, E
Primary Accession	O14763
Other Accession	AF012535, 2338419
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	47878
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DR5 antibody can be used for detection of DR5 expression by Western blot at 2 μg/mL. Antibody can also be used for immunocytochemistry starting at 5 μg/mL. For immunofluorescence start at 10 μg/mL.

Additional Information

Gene ID	8795
Other Names	DR5 Antibody: DR5, CD262, KILLER, TRICK2, TRICKB, ZTNFR9, TRAILR2, TRICK2A, TRICK2B, TRAIL-R2, KILLER/DR5, DR5, UNQ160/PRO186, Tumor necrosis factor receptor superfamily member 10B, Death receptor 5, TRAIL receptor 2, tumor necrosis factor receptor superfamily, member 10b
Target/Specificity	TNFRSF10B; Antibody has no cross reaction to DR4.
Reconstitution & Storage	DR5 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	DR5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TNFRSF10B
Synonyms	DR5, KILLER, TRAILR2, TRICK2, ZTNFR9
Function	Receptor for the cytotoxic ligand TNFSF10/TRAIL (PubMed: 10549288). The adapter molecule FADD recruits caspase-8 to the activated receptor. The resulting death-inducing signaling complex (DISC) performs caspase-8 proteolytic activation which initiates the subsequent cascade of caspases (aspartate-specific cysteine proteases) mediating apoptosis. Promotes the

	activation of NF-kappa-B. Essential for ER stress-induced apoptosis.
Cellular Location	Membrane; Single-pass type I membrane protein.
Tissue Location	Widely expressed in adult and fetal tissues; very highly expressed in tumor cell lines such as HeLaS3, K-562, HL-60, SW480, A-549 and G-361; highly expressed in heart, peripheral blood lymphocytes, liver, pancreas, spleen, thymus, prostate, ovary, uterus, placenta, testis, esophagus, stomach and throughout the intestinal tract; not detectable in brain

Background

DR5 Antibody: Apoptosis is induced by certain cytokines including TNF and Fas ligand in the TNF family through their death domain containing receptors. TRAIL/Apo2L is a new member of the TNF family. DR4 was recently identified as the receptor for TRAIL. A novel death domain containing receptor for TRAIL was more recently identified and designated DR5, Apo2, TRAIL-R2, TRICK2, or KILLER by several groups independently. Like DR4, DR5 transcript is widely expressed in normal tissues and in many types of tumor cells. DR5 binds to TRAIL and mediates TRAIL induced cell death. Overexpression of DR5 induces apoptosis and activates NF-κB.

References

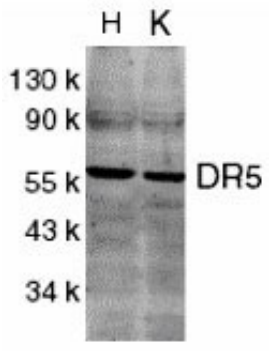
Pan G, Ni J, Wei YF, Yu G, Gentz R, Dixit VM. An antagonist decoy receptor and a death domain-containing receptor for TRAIL. Science 1997;277:815-8

Sheridan JP, Marsters SA, Pitti RM, Gurney A, Skubatch M, Baldwin D, Ramakrishnan L, Gray CL, Baker K, Wood WI, Goddard AD, Godowski P, Ashkenazi A. Control of TRAIL-induced apoptosis by a family of signaling and decoy receptors. Science 1997;277:818-21

Walczak H, Degli-Esposti MA, Johnson RS, Smolak PJ, Waugh JY, Boiani N, Timour MS, Gerhart MJ, Schooley KA, Smith CA, Goodwin RG, Rauch CT. TRAIL-R2: a novel apoptosis-mediating receptor for TRAIL. EMBO J 1997;16:5386-97

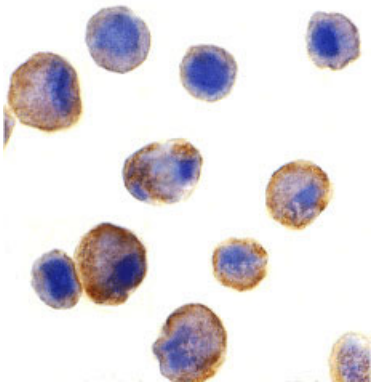
MacFarlane M, Ahmad M, Srinivasula SM, Fernandes-Alnemri T, Cohen GM, Alnemri ES. Identification and molecular cloning of two novel receptors for the cytotoxic ligand TRAIL. J Biol Chem 1997;272:25417-20

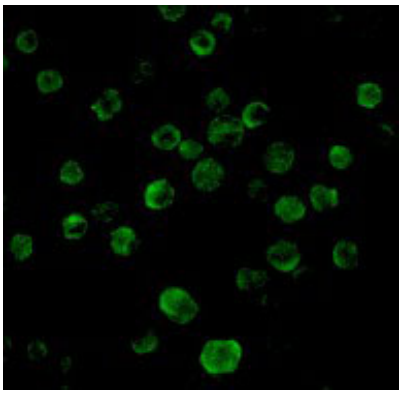
Images



Western blot analysis of DR5 in HeLa (H) and K562 (K) cell lysates with DR5 antibody at 2 µg/mL.

Immunocytochemistry of DR5 in HeLa cells with DR5 antibody at 5 µg/mL.





Immunofluorescence of DR5 in HeLa cells with DR5 antibody at 20 µg/mL.

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