

Product Information

Anti-DR5

produced in rabbit, affinity isolated antibody

Catalog Number **D3938**

Synonyms: Anti-Death Receptor 5; Anti-KILLER; Anti-TRAIL-R2; Anti-TRICK2

Product Description

Anti-DR5 is produced in rabbit using as immunogen a peptide corresponding to amino acids 388-407 of human DR5 precursor.

Anti-DR5 recognizes DR5 by immunoblotting.

Apoptosis or programmed cell death is induced in cells by a group of death domain-containing receptors including TNFR1, Fas, DR3, DR4, and DR5. Binding of ligand to these receptors sends signals that activate members of the caspase family of proteases. The signals ultimately cause the degradation of chromosomal DNA by activating DNase.

DR5 was characterized independently by several groups hence it is known by a number of names: TRAIL-R2, TRICK2 and KILLER. It is a novel death domain containing receptor whose ligand has been identified as TRAIL or apoptosis-inducing ligand 2 (Apo2L). It is a member of the TNF superfamily of receptors that induce apoptosis. These proteins share homologies in both their extracellular ligand binding domains and their intracellular effector domains (death domains). These death domains are approximately 80 amino acids long.

DR5 induces apoptosis in a variety of human tumor cell lines, but not in normal cells and activates NF- κ B. DR5, like DR4, is expressed in a number of cell types and is particularly abundant in lymphocytes and spleen.

Reagents

Supplied at 0.5 mg/ml in phosphate buffered saline, containing 0.02% sodium azide.

Storage/Stability

Antibody can be stored at 2-8 °C for three months and at -20 °C for 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 and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Product Profile

Immunoblotting: a recommended working concentration is 2 μ g/ml using human HeLa and K562 cell extracts.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Pan G, et al., An antagonist decoy receptor and a death domain-containing receptor for TRAIL. *Science*, **277**, 815-818 (1997).
2. Sheridan, J. P., et al., Control of TRAIL-induced apoptosis by a family of signaling and decoy receptors. *Science*, **277**, 818-821 (1997).
3. Walozak, H., et al., TRAIL-R2: a novel apoptosis-mediating receptor for TRAIL. *EMBO*, **16**, 5386-5397 (1997).
4. MacFarlane, M., et al., Identification and molecular cloning of two novel receptors for the cytotoxic ligand TRAIL. *J. Biol. Chem.*, **272**, 25417-25420 (1997).
5. Screaton, G. R., et al., TRICK2, a new alternatively spliced receptor that transduces the cytotoxic signal from TRAIL. *Curr. Biol.*, **7**, 693-696 (1997).
6. Chaudhary, P. M., et al., DR5, a new member of the TNFR family and DR4 induce FADD-dependent apoptosis and activate the NF- κ B pathway. *Immunity*, **7**, 821-830 (1997).

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