

Death Receptor Antibody Sampler Kit II



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1 Kit (7 x 20 microliters)

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For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Fas (C18C12) Rabbit mAb	4233	20 µl	40-50 kDa	Rabbit IgG
TNF-R1 (C25C1) Rabbit mAb	3736	20 µl	55 kDa	Rabbit IgG
TNF-R2 (E8D7P) Rabbit mAb	72337	20 µl	60-80 kDa	Rabbit IgG
DR3 (D4O3X) Rabbit mAb	20772	20 µl	55-60 kDa	Rabbit IgG
DR4 (D9S1R) Rabbit mAb	42533	20 µl	35-55 kDa	Rabbit IgG
DR5 (D4E9) XP [®] Rabbit mAb	8074	20 µl	40, 48 kDa	Rabbit IgG
DR6 (E8D2I) Rabbit mAb	93026	20 µl	80, 120 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Death Receptor Antibody Sampler Kit II provides an economical means to investigate members of the death receptor family. The kit includes enough antibody to perform two western blot experiments with each primary antibody.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Background

The tumor necrosis factor receptor family, which includes TNF-R1, TNF-R2, Fas, DR3, DR4, DR5, and DR6, plays an important role in the regulation of apoptosis in various physiological systems (1,2). The receptors are activated by a family of cytokines that include TNF, FasL, TWEAK, and TRAIL. They are characterized by a highly conserved extracellular region containing cysteine-rich repeats and a conserved intracellular region of about 80 amino acids termed the death domain (DD). The DD is important for transducing the death signal by recruiting other DD containing adaptor proteins (FADD, TRADD, RIP) to the death-inducing signaling complex (DISC) resulting in activation of caspases. The two receptors for TNF- α , TNF-R1 (55 kDa) and TNF-R2 (75 kDa) can mediate distinct cellular responses (3,4). In most cases cytotoxicity elicited by TNF has been reported to act through TNF-R1 (5,6). DR3/WSL-1/Apo-3/TRAMP/LARD is a TNFR family member containing the characteristic extracellular cysteine-repeats, transmembrane region, and an intracellular DD (7-11). DR3 is activated by its ligand Apo-3L/TWEAK to induce apoptosis and activation of NF- κ B (12,13). Like TNF-R1, DR3 binds to the DD adaptor protein TRADD, which can then associate with other DD proteins like FADD and RIP as well as members of the TRAF family (7,8). Tissue expression of DR3 is very restricted, primarily seen on the surface of activated thymocytes and lymphocytes and plays an important role in thymocyte negative selection (7,8,14). Studies have also indicated an association with DR3 and rheumatoid arthritis (15,16). DR4 (TRAIL-R1, TNFRSF10A) and DR5 (TRAIL-R2, TNFRSF10B) are receptors for the cytokine TRAIL. Both receptors contain death domains that recruit DISC complexes triggering caspase activation and apoptosis (17-20). DR6, also known as TNFRSF21, is a TNFR family member able to induce apoptosis as well as activation of NF- κ B and JNK (21). DR6 appears to play a critical role in the activation and differentiation of T and B lymphocytes (22,23). In the nervous system, β -amyloid precursor protein (APP) activates DR6 to trigger neuronal degeneration (24).

Background References

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