



Anti-Mouse DAN (#7K12)

20180305BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	103-M07
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat immunized with purified mouse recombinant DAN. The IgG2 fraction of the culture supernatant was purified by Protein A/G affinity chromatography.

Target Background

Synonyms (Target):	Nbl1; DAN; NO3; Dana; D4H1S1733E
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DAN (differential screening-selected gene aberrative in neuroblastoma) was initially identified as a gene whose expression is downregulated in srctransformed rat fibroblasts. DAN has now been shown to be a prototypical member of the DAN family of secreted glycoproteins that are putative BMP antagonists. DAN family members share a cysteine-rich domain that is structurally related to the cysteine-knot motif found in TGFβ superfamily ligands. There are at least five mouse DAN family members, including DAN, Gremlin/DRM, Cer1 (Cerberus-related), Dante and PRDC (protein-related to DAN and cerberus). Additional DAN family members include Xenopus Cerberus, chick Caronte, and C. elegans CeCan 1. Murine DAN binds BMP2 in immunoprecipitation experiments and acts as a BMP antagonist in Xenopus animal cap explants. The DAN family of proteins are thought to act as antagonists by binding BMP ligands and preventing their interactions with signaling receptor complexes. Recombinant mouse DAN have been shown to bind BMP4 in a functional ELISA. It is likely the various DAN family members and other TGFβ BMP antagonists including Noggin, Chordin, Follistatin, and TSG can selectively antagonize the activities of different subsets of TGFβ superfamily ligands. These antagonists represent one of the many elaborate regulatory mechanisms that have evolved to control the bioactivities of the TGFβ superfamily ligands.

Database References Target

Protein RefSeq:	NP_032701.2
Uniprot ID:	Q61477.2
mRNA RefSeq:	NM_008675.2

Product Specifications

Host	Rat
Reactivity against	Mouse
Clonality	Monoclonal Antibody
Clone	(#7K12)
Isotype	IgG2
Purification	Protein G/A chromatography
Antigen	mouse recombinant DAN
Formulation	lyophilized
Reconstitution buffer	PBS

Reconstitution: Reconstitute the antibody with 500 µl sterile PBS and the final concentration is 200 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks:



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

The antibody can be used within the following applications:

WB

Recommended usage:

WB: 1:500-1000

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