

NBL1 active protein

NBL1 Protein, Mouse, Recombinant (His Tag)

CATALOG #
AAA258216

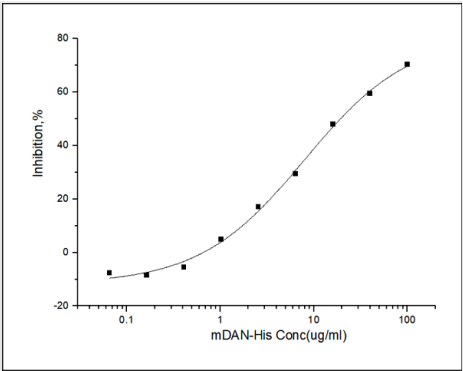
HOST
HEK293 Cells

PRODUCT SYNONYMS

NBL1; NBL1 Protein; Mouse; Recombinant (His Tag); Mouse NBL1/DAND1/DAN Protein (His Tag); D4H1S1733E Protein; DAN Protein; Dana Protein; NO3 Protein; neuroblastoma 1; DAN family BMP antagonist; NBL1 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Asp17 8
Species	Mouse
Activity	Measured by its ability to inhibit BMP4-induced alkaline phosphatase production by MC3T3E1 mouse preosteoblast cells. The ED50 for this effect is 3-9ug/mL.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ala 17
Tag	C-His
Protein Construction	A DNA sequence encoding the mouse NBL1 (Q61477)(Met 1-Asp 178) was expressed, with a C-terminal polyhistidine tag.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured by its ability to inhibit BMP4-induced alkaline phosphatase production by MC3T3E1 mouse preosteoblast cells. The ED50 for this effect is 3-9 ug/mL.

ADDITIONAL INFORMATION

Related Product Information for NBL1 active protein

Background: The Dan (Differential screening-selected gene aberrative in neuroblastoma, also known as N03) gene was first identified as the putative rat tumor suppressor gene and encodes a protein structurally related to Cerberus and Gremlin in the vertebrates. It is a founding member of the DAN family of secreted proteins, acts as an inhibitor of cell cycle progression, and is closely involved in retinoic acid-induced neuroblastoma differentiation. There are at least five mammalian protein members in the evolutionarily conserved Dan family including DAN, Gremlin/DRM, Cer1 (Cerberus-related), Dante, and PRDC (protein related to DAN and Cerberus), and share the C-terminal cystine-knot motif. As a secreted glycoprotein, DAN is a member of a class of glycoproteins shown to be secreted inhibitors of the transforming growth factor-beta (TGF-beta) and bone morphogenic protein pathways. It binds to BMPs and preventing their interactions with signaling receptor complexes, and accordingly regulates the processes of embryonic development and tissue differentiation. DAN gene product may have an important role in the regulation of the entry of cells into the S phase. Besides, the DAN gene product possesses an ability to revert phenotypes of transformed rat fibroblasts and represents a candidate tumor suppressor gene for neuroblastoma.

References

Ozaki T, et al. (1995) Overexpression of DAN gene product in normal rat fibroblasts causes a retardation of the entry into the S phase. *Cancer Res.* 55(4): 895-900. Nakamura Y, et al. (1997) A product of DAN, a novel candidate tumour suppressor gene, is secreted into culture medium and suppresses DNA synthesis. *Eur J Cancer.* 33(12): 1986-90. Ogita J, et al. (2001) Expression of the Dan gene during chicken embryonic development. *Mech Dev.* 109(2): 363-5. Kim AS, et al. (2003) Expression of the BMP antagonist Dan during murine forebrain development. *Brain Res Dev Brain Res.* 145(1): 159-62.

NCBI AND UNIPROT INFORMATION

NCBI GI #	148234601
NCBI GeneID	17965
NCBI Accession #	NP_032701.2
NCBI GenBank Nucleotide #	NM_008675.2
UniProt Accession #	Q61477; Q499K5
Molecular Weight	19,107 Da
NCBI Official Full Name	neuroblastoma suppressor of tumorigenicity 1
NCBI Official Synonym Full Names	neuroblastoma, suppression of tumorigenicity 1
NCBI Official Symbol	Nbl1
NCBI Official Synonym Symbols	DAN; NO3; Dana; D4H1S1733E
NCBI Protein Information	neuroblastoma suppressor of tumorigenicity 1

UniProt Protein Name	Neuroblastoma suppressor of tumorigenicity 1
UniProt Gene Name	Nbl1
UniProt Synonym Gene Names	Dan; Dana
UniProt Entry Name	NBL1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/hek293-cells-active-protein/nbl1/258216>