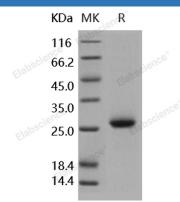
Recombinant Human NBL1/DAND1 Protein (His Tag)

Catalog Number: PKSH031808

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description | |
|----------------|---|
| Species | Human |
| Source | HEK293 Cells-derived Human NBL1/DAND1 protein Met 1-Asp 180, with an C- |
| | terminal His |
| Calculated MW | 19.3 kDa |
| Observed MW | 27 kDa |
| Accession | NP_005371.1 |
| Bio-activity | Measured by its ability to inhibit BMP4-induced activity in MC3T3-E1 Mouse |
| | osteoblastic cells. The ED_{50} for this effect is typically 5-20 µg/ml in the presence of 50 |
| | ng/mL of recombinant human BMP4. |
| Properties | |
| Purity | > 98 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 |
| | °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of |
| | reconstituted samples are stable at $< -20^{\circ}$ C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from sterile PBS, pH 7.4 |
| | Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants |
| | before lyophilization. |
| | Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 98 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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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 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 cereberus); 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 regulation of the entry of cells into the S phase. In addition; DAN gene product possesses an ability to revert phenotypes of transformed rat fibroblasts and represents a candidate tumour suppressor gene for neuroblastoma.