

TECHNICAL DATA SHEET

Recombinant Human DKK-2 (Carrier-free)

Catalog Number: 21-7101

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human DKK-2 (Carrier-free)

DESCRIPTION

The DKK (Dickkopf) family of secreted proteins includes DKK-1 through -4, and a related protein, Soggy (DKK-11). Like DKK-1, DKK-2 can act as an antagonist of the Wnt signaling pathway, forming inhibitory complexes with Wnt co-receptor LRP6 and Kremen-2. However, when LRP6 is overexpressed direct binding of DKK-2 activates canonical Wnt signaling. DKK-2 is expressed in bone, eye and other mesenchymal tissues.

MOLECULAR MASS

Recombinant Human DKK-2 contains 234 amino acid residues and has a calculated molecular weight of 25.8 kDa. Due to glycosylation, it migrates at approximately 31-36 kDa by SDS-PAGE analysis under non-reducing conditions.

AMINO ACID SEQUENCE

SQIGSSRAKL NSIKSSLGGE TPGQAANRSA GMYQGLAFGG SKKGKNLGQA YPCSSDKECE VGRYCHSPHQ GSSACMVCRR
 KKKRCHRDMG CCPSTRCNNG ICIPVTESIL TPHIPALDGT RHRDRNHGHY SNHDLGWQNL GRPHTKMSHI KGHEGDPCLR
 SSDCIEGFCC ARHFWTKICK PVLHQGEVCT KQRKKGSHGL EIFQRCDCAK GLSCKVWKDA TYSSKARLHV CQKI

SOURCE

CHO cells

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

BIOACTIVITY

An inhibition assay is used to determine activity. The expected ED₅₀ for inhibition of alkaline phosphatase activity in differentiating MC3T3 E1 cells is 0.5– 1.0 μg/ml.

RESEARCH AREAS

Bone and Cartilage, Cancer, Neurobiology

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Krupnik VE, Sharp JD, Jiang C, Robison K, Chickering TW, Amaravadi L, Brown DE, Guyot D, Mays G, Leiby K, Chang B, et al. 1999. *Gene*. 238(2): 301-313.
 Logan CY and Nusse R. 2004. *Annu Rev Cell Dev Biol*. 20: 781-810. Niehrs C. 2006. *Oncogene*. 25: 7469-7481. Mao B, Wu W, Li Y, Hoppe D, Stanek P, Glinka A and Niehrs C. 2001. *Nature*. 411(6835): 321-325. Mao B and Niehrs C. 2003. *Gene*. 302(1-2): 179-183. Monaghan AP, Kioschis P, Wu W, Zuniga A, Bock D, Poustka A, Delius H and Niehrs C. 1999. *Mech Dev*. 87(1-2): 45-56.

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