

TECHNICAL DATA SHEET

Recombinant Human DKK-3 (Carrier-free)

Catalog Number: 21-7102

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Human DKK-3 (Carrier-free)

DESCRIPTION

The DKK (Dickkopf) family of secreted proteins includes DKK-1 through -4, and a related protein, Soggy (DKK-11). DKK-3 exhibits the most sequence homology with Soggy. It is expressed in many normal tissues including brain, spinal cord and heart. Also known as REIC (Reduced Expansion in Immortalized Cells), DKK-3 may be a negative growth regulator as expression is downregulated in a variety of cancer cell lines and tumors. Unlike other DKK members, it has been suggested that DKK-3 does not bind to LRP5 and/or LRP6.

MOLECULAR MASS

Recombinant Human DKK-3 contains 329 amino acid residues and has an expected molecular weight of 36.3 kDa. Due to glycosylation, it migrates at approximately 39-49 kDa by SDS-PAGE analysis under non-reducing conditions.

AMINO ACID SEQUENCE

APAPTATSAP VKPGPALSYP QEEATLNEMF REVEELMEDT QHKLRSAVEE MEAEAAAKA SSEVNLNLP PSYHNETNTD
TKVGNNTIHV HREIHKITNN QTGQMVFSET VITSVGDEEG RRSHECIIDE DCGPSMYCQF ASFYTCQPC RGQRMLCTRD
SECCGDQLCV WGHCTKMATR GSNGTICDNQ RDCQPGLCCA FQRGLLPVC TPLPVEGELC HDPASRLDL ITWELEPDGA
LDRPCASGL LCQPHSHSLV YVCKPTFVGS RDQDGEILLP REVPDEYEVG SFMEEVRQEL EDLERSLTEE MALREPAAAA AALLGGEEI

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 2.0-4.0 ng/ml.

RESEARCH AREAS

Bone and Cartilage, Cancer, Neurobiology

RECONSTITUTION

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

REFERENCES

Krupnik VE1, Sharp JD, Jiang C, Robison K, Chickering TW, Amaravadi L, Brown DE, Guyot D, Mays G, Leiby K, et al. 1999. Gene. 238(2): 301-313. Tsuji T, Miyazaki M, Sakaguchi M, Inoue Y and Namba M. 2000. Biochem Biophys Res Commun. 268: 20-24. Niehrs C. 2006. Oncogene. 25: 7469-7481. Fujii Y, Hoshino T and Kumon H. 2014. Acta Med Okayama. 68(2): 63-78. Hsieh SY, Hsieh PS, Chiu TC and Chen WY. 2004. Oncogene. 23: 9183-9189.

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