

Human CellExp DKK-1, Human recombinant protein
Dickkopf-related protein-1, Dickkopf-1, SK
Catalog # PBV10767r**Specification**

Human CellExp DKK-1, Human recombinant protein - Product info

Primary Accession [O94907](#)
Calculated MW **35-40 kDa** KDa

Human CellExp DKK-1, Human recombinant protein - Additional Info

Gene ID **22943**
Gene Symbol **DKK-1**

Other Names

Dickkopf-related protein-1, Dickkopf-1, SK

Gene Source **Human**
Source **HEK 293 cells**
Assay&Purity **SDS-PAGE; ≥97%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Sequence

TLNSVLNSNA IKNLPPPLGG AAGHPGSAVS
AAPGILYPGG NKYQTIDNYQ PYPCAEDEEC
GTDEYCASPT RGGDAGVQIC LACRKRKRRC
MRHAMCCPGN YCKNGICVSS DQNHFRGEIE
ETITESFGND HSTLDGYSRR TTLSSKMYHT
KGQEGSVCLR SSDCASGLCC ARHFWSKICK
PVLKEGQVCT KHRRKGSHGL EIFQRCYCGE
GLSCRIQKDH HQASNSSRLH TCQRH

Target/Specificity
DKK-1

Application Notes

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 1X PBS, pH 7.5.

Human CellExp DKK-1, Human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Human CellExp DKK-1, Human recombinant protein - Images

Human CellExp DKK-1, Human recombinant protein - Background

DKK-1 is a member of the DKK protein family which also includes DKK-2, DKK-3 and DKK-4. DKK-1 was originally identified as a *Xenopus* head forming molecule that behaves as an antagonist for Wnt signaling. Subsequent studies have shown that DKK-1 and DKK-4 play an important regulatory role in the Wnt/ β -catenin signaling pathway by forming inhibitory complexes with LDL receptor-related proteins 5 and 6 (LRP5 and LRP6), which are essential components of the Wnt/ β catenin signaling system. LRP5 and LRP6 are single-pass transmembrane proteins that appear to act as co-receptors for Wnt ligands involved in the Wnt/ β catenin signaling cascade. It has been suggested that by inhibiting Wnt/ β catenin signaling, which is essential for posterior patterning in vertebrates, DKK-1 permits anterior development. This notion is supported by the finding that mice deficient of DKK-1 expression lack head formation and die during embryogenesis. Recombinant human DKK-1 expressed in human 293 cells is a 35-40 kDa glycoprotein containing 235 amino-acid residues.

Human CellExp DKK-1, Human recombinant protein - References

Fedi P., et al. *J. Biol. Chem.* 274:19465-19472(1999).
Krupnik V.E., et al. *Gene* 238:301-313(1999).
Tate G., et al. Submitted (NOV-1998) to the EMBL/GenBank/DDBJ databases.
Roessler E., et al. *Cytogenet. Cell Genet.* 89:220-224(2000).
Clark H.F., et al. *Genome Res.* 13:2265-2270(2003).