

32-20570: Recombinant Human DKK-1(Discontinued)

Reactivity : Human, Mouse, Rat

Alternative Name : Dickkopf-related protein-1, Dickkopf-1, SK

Description

Source:HEK293 cells

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 important regulatory roles in the Wnt/Beta -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/Beta -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/Beta -catenin signaling cascade. It has been suggested that by inhibiting Wnt/Beta -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. Mature human DKK-1 expressed in HEK293 cells is a 35-40 kDa glycoprotein containing 235 amino acid residues. The calculated molecular weight of Recombinant Human DKK-1 expressed in HEK293 cells is 25.8 kDa.

Product Info

Amount : 2 µg / 10 µg

Purification : Purity: >= 97% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : TLNSVLNSNA IKNLPPPLGG AAGHPGSAVS AAPGILYPPG NKYQTIDNYQ PYPCAEDEEC GTDEYCASPT
RGGDAGVQIC LACRKRKRRC MRHAMCCPGN YCKNGICVSS DQNHFRGEIE ETITESFGND HSTLDGYSRR
TTLSSKMYHT KGQEGSVCLR SSDCASGLCC ARHFWSKICK PVLKEGQVCT KHRRKGSHGL EIFQRCYCGE
GLSCRIQKDH HQASNSSLRH TCQRH

Application Note

Determined by its ability to inhibit mWnt3a-induced TCF/LEF-luciferase activity in reporter HEK293 cells.