

## 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.