

Recombinant Human DKK-1
Catalog # PBG10066**Specification**

Recombinant Human DKK-1 - Product Information**Recombinant Human DKK-1 - Additional Information****Description**

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.

Biological Activity

Determined by its ability to inhibit the proliferation of HCT116 colorectal carcinoma cells. Approximately 40% growth inhibition was achieved at a DKK-1 concentration of 200ng/ml.

Authenticity

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

Endotoxin

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

Protein Content

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

Storage

-20°C

Precautions

Recombinant Human DKK-1 is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human DKK-1 - 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](#)

Recombinant Human DKK-1 - Images