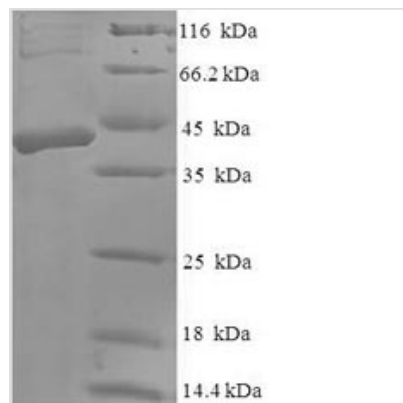




Recombinant Human Dickkopf-related protein 2 (DKK2)

Product Code	CSB-EP866207HU
Relevance	Antagonizes canonical Wnt signaling by inhibiting LRP5/6 interaction with Wnt and by forming a ternary complex with the transmembrane protein KREN that promotes internalization of LRP5/6. DKKs play an important role in vertebrate development, where they locally inhibit Wnt regulated processes such as antero-posterior axial patterning, limb development, somitogenesis and eye formation. In the adult, Dkks are implicated in bone formation and bone disease, cancer and Alzheimer disease .
Abbreviation	Recombinant Human DKK2 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9UBU2
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	KLNSIKSSLGGETPGQAANRSAGMYQGLAFGGSKKGKKNLGQAYPCSSDKEC EVGRYCHSPHQGSSACMVCRRKKKRCHRDGMCCPSTRCNGICIPVTESILT PHIPALDGTRHRDRNHGHYSNHDLGWQNLGRPHTKMSHIKGHEGDPCLRSS DCIEGFCCARHFWTKICKPVLHQGEVCTKQRKKGSHGLEIFQRCDCAKGLSC KVWKDATYSSKARLHVCQKI
Research Area	Signal Transduction
Source	E.coli
Target Names	DKK2
Expression Region	34-259aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	41.0kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The expression region of this recombinant Human DKK2 covers amino acids 34-259. This DKK2 protein is theoretically predicted to have a molecular weight of 41 kDa. This DKK2 recombinant protein is manufactured in e.coli. The N-terminal 6xHis-SUMO tag was fused into the coding gene segment of DKK2, making it easier to detect and purify the DKK2 recombinant protein in the later stages of expression and purification.

Human dickkopf-related protein 2 (DKK2) is a member of the Dickkopf family of proteins, which are involved in the regulation of the Wnt signaling pathway. The Wnt signaling pathway plays a critical role in embryonic development, tissue homeostasis, and cell differentiation. DKK2 acts as an antagonist of Wnt signaling by binding to the LRP5/6 co-receptors, preventing their interaction with Wnt ligands. By inhibiting Wnt signaling, DKK2 contributes to the regulation of cell fate decisions and tissue development. Dysregulation of DKK2 has been implicated in various diseases, including cancer, where altered Wnt signaling is often observed. Studying DKK2 provides insights into the intricate regulatory mechanisms of Wnt signaling and its implications in health and disease.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.