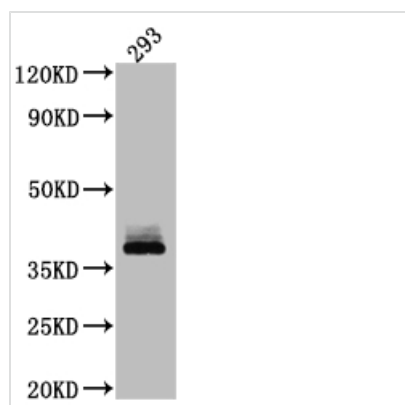




DKK1 Recombinant Monoclonal Antibody

Product Code	CSB-RA576260A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O94907
Immunogen	A synthesized peptide derived from human DKK1
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	Antagonizes canonical Wnt signaling by inhibiting LRP5/6 interaction with Wnt and by forming a ternary complex with the transmembrane protein KREMEN that promotes internalization of LRP5/6 (PubMed:22000856). 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 (PubMed:17143291). Inhibits the pro-apoptotic function of KREMEN1 in a Wnt-independent manner, and has anti-apoptotic activity (By similarity).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular; Developmental biology; Immunology; Stem cells
Gene Names	DKK1
Clone No.	1D12

Image



Western Blot

Positive WB detected in: 293 whole cell lysate

All lanes: DKK1 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 29 kDa

Observed band size: 38 kDa



Description

To create a recombinant monoclonal antibody for DKK1, the DKK1 monoclonal antibody is harvested and its gene is sequenced. A DKK1 monoclonal antibody gene-carrying vector is constructed, and the recombined vector is transfected into a host cell line for culture. Human DKK1-synthesized peptide is used as the immunogen in the production of the DKK1 monoclonal antibody. The resulting DKK1 recombinant monoclonal antibody is then purified using affinity chromatography and tested for specificity using ELISA and WB applications. It only recognizes human DKK1 protein.

The DKK1 protein is a secreted protein that plays a role in embryonic development, tissue homeostasis, and disease. Its primary function is as an inhibitor of the Wnt signaling pathway, which is involved in cell proliferation, differentiation, and survival. DKK1 does this by binding to the Wnt co-receptor LRP5/6 and blocking its interaction with the Wnt ligand, which is required for activation of the Wnt pathway. As a result, DKK1 suppresses the transcription of Wnt target genes and influences many cellular processes such as embryonic development, bone formation, tissue regeneration, tumorigenesis, and others. Additionally, DKK1 has been implicated in several human diseases, including cancer, osteoporosis, Alzheimer's disease, and schizophrenia.