

Active Recombinant Human DKK1 Protein

Cat. No. DKK1-430D **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human DKK1 Protein without tag was expressed in E. coli.
Species	Human
Source	E.coli
Description	Dickkopf related protein 1 (DKK1) is a chemokine that belongs to 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. It is one of the most up-regulated genes during androgen-potentiated balding, with DKK-1 messenger RNA up-regulated a few hours after DHT treatment of hair follicles at the dermal papilla in vitro. Neutralizing bodies against DKK-1 reverses DHT effects on outer root sheath keratinocytes. DKK-1 expression is attenuated by L-threonate, a metabolite of ascorbate in vitro. DKK1 promotes LRP6 internalization and degradation as it forms a ternary complex with the cell surface receptor Kremen. DKK1 not only functions as a head inducer during development, but also regulates joint remodeling and bone formation, which indicate its role in the pathogenesis of rheumatoid arthritis and multiple myeloma.
Form	Sterile Filtered White lyophilized (freeze-dried) powder.
Bio-activity	ED50 < 6 µg/mL, measured in stimulation of alkaline phosphatase activity using CCI-226 cells. Up to 180% stimulation of alkaline phosphatase activity was observed at 10.0 µg/mL.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	17-22 kDa, observed by reducing SDS-PAGE.
AA Sequence	TLNSVLNSNAIKNLPPPLGGAAGHPGSAVSAAPGILYPGGNKYQTIDNYQPYPYCAED EECGTDEYCASPTRGGDAGVQICLACRKRRCMRHAMCCPGNYCKNGICVSSD QNHFRGEIETITESFGNDHSTLDGYSRRTLSSKMYHTKGQEGSVCLRSSDCASG LCCARHFWSKICKPVLKEGQVCTKHRRKGS HGLEIFQRCYCGEGLSCRIQKDDHHQA SNSSRLHTCQRH
Endotoxin	< 0.2 EU/μg, determined by LAL method.
Purity	> 95% as analyzed by SDS-PAGE.
Storage	Lyophilized recombinant human DKK1 (rhDKK1) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rhDKK1 should be stable up to 1 week at 4 centigrade or up to 2 months at -20 centigrade.
Storage Buffer	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH ₂ O or PBS at 100 μg/mL.

GENE INFORMATION

Gene Name	DKK1 dickkopf 1 homolog (Xenopus laevis) [Homo sapiens]
Official Symbol	DKK1
Synonyms	DKK1; dickkopf 1 homolog (Xenopus laevis); dickkopf (Xenopus laevis) homolog 1; dickkopf-related protein 1; DKK 1; SK; hDkk-1; dickkopf-1 like; dickkopf related protein-1; DKK-1;
Gene ID	22943

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_012242
Protein Refseq	NP_036374
MIM	605189
UniProt ID	O94907

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA