CHASELECTION

Recombinant Human Dkk1, His Tag

货号(Catalog Number)：CY100FXXXX(L)

别名(synonym)：
Dickkopf-1; dickkopf-related protein 1; Dkk1; Dkk-1; hDkk-1; SKdickkopf-1 like

来源(Source)： Human embryonic kidney cell, HEK293-derived human Dkk1 protein

蛋白结构（Structure): His Tag

基因 ID： O94907

氨基酸序列：

Met 2-His 266

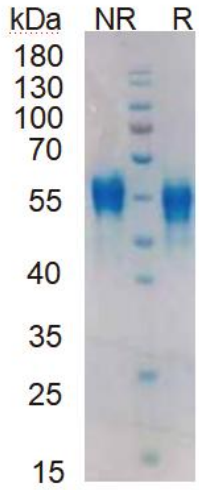
分子量大小(MW):

26.6 kDa

纯度（Purity）：

> 95%，determined by SDS-PAGE

SDS-PAGE



2 ug/lane protein was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Coomassie Blue staining.

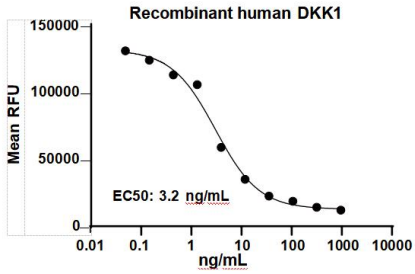
内毒素含量（Endotoxin）：

<0.010 EU per 1 ug of the protein by the LAL method

制剂(Formulation)：

Solution protein.Dissolved in sterile PBS buffer.This solution can be diluted into other aqueous buffers. Centrifuge the vial prior to opening.

活性检测（Biological Activity）：



Measured by its ability to inhibit Wnt induced TCF reporter activity in HEK293 human embryonic kidney cells.

储存与运输(Storage)：

Avoid repeated freeze-thaw cycles.
It is recommended that the protein be aliquoted for optimal storage.
36 months from date of receipt, -20 to -70 °C as supplied.

产品背景介绍（Production）

Dickkopf related protein 1 (Dkk-1) is the founding member of the Dickkopf family of proteins that includes Dkk-1, -2, -3, -4, and a related protein,Soggy. Dkk proteins are secreted proteins that contain two conserved cysteine-rich domains separated by a linker region. Each domain containsten cysteine residues. Mature human Dkk-1 is a 40 kDa glycosylated protein that shares 86%, 87%, 90% and 91% aa sequence identity with mouse, rat, rabbit and bovine Dkk-1, respectively. It also shares 42% and 36% aa identity with human Dkk-2 and Dkk-4, respectively. Dkk-1 and Dkk-4 are well documented antagonists of the canonical Wnt signaling pathway. This pathway is activated by Wnt engagement of a receptor complex composed of the Frizzled proteins and one of two low-density lipoprotein receptor-related proteins, LRP5 or LRP6. Dkk-1 antagonizes Wnt by forming

ternary complexes of LRP5/6 with Kremen1 or Kremen2. Dkk-1/LRP6/Krm2 complex internalization has been shown to down-regulate Wnt signaling.Dkk-1 is expressed throughout development and antagonizes Wnt-7a during limb development. Other sites of expression include developing neurons, hair follicles and the retina of the eye. The balance between Wnt signaling and Dkk-1 inhibition is critical for bone formation and homeostasis. Insufficient or excess Dkk-1 activity in bone results in increased or decreased bone density, respectively. In adults, Dkk-1 is expressed in osteoblasts and osteocytes, and neurons. Cerebral ischemia induces Dkk-1 expression, which contributes to neuronal cell death.