



# Recombinant Protein Technical Manual

**Recombinant Human DKK1/Dkk Protein (His Tag)(Active)**  
RPES0094

## Product Data:

**Product SKU:** RPES0094

**Size:** 20µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_036374.1

## Protein Information:

**Molecular Mass:** 25.8 kDa

**AP Molecular Mass:** 45 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to inhibit Wnt3a-induced alkaline phosphatase production by C3H10T1/2 cells. The ED50 for this effect is approximately 0.1-0.4 µg/ml in the presence of 10 ng/mL of mouse Wnt3a.

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Dickkopf-related protein 1; Dickkopf; Dkk; SK

## Immunogen Information:

**Sequence:** Met 2-His 266

## Background:

Dickkopf (DKK) family proteins, consisting of DKK, DKK-2, DKK-3 and DKK-4, function as secreted Wnt antagonists by inhibiting Wnt coreceptors LRP5/6. DKK, DKK-2, and DKK-4 also bind cell surface Kremen or Kremen-2 and promote the internalization of LRP5/6. Dickkopf related protein 1 (DKK) was initially identified as an inducer of head formation in *Xenopus* embryos. DKK protein modulates Wnt signalling pathway during embryonic development. Increased levels of DKK are found in the majority of lung cancers, esophageal squamous cell carcinomas, and hormone-resistant breast cancers, while DKK expression is decreased in malignant melanoma and colorectal cancers.