**Preparation**

This antibody was obtained from a rabbit immunized with purified, recombinant Human DKK-1 (rh DKK-1; Catalog#10170-H08H; NP_036374.1; Met2-His266) and was produced using recombinant antibody technology.

**Specificity**

Human DKK-1 has cross-reactivity with Rhesus DKK-1 / Dkk1 (Catalog#11089-K08H) in ELISA assay.

**Storage**

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. Avoid repeated freeze-thaw cycles.

**Applications**

Neutralization – The neutralization activity of antibody is measured by its ability to inhibit Wnt3a-induced alkaline phosphatase production by C3H10T1/2 cells. The Neutralization titer (IC50) is typically 0.1-0.4 μg/mL in the presence of 40 ng/mL Mouse Wnt-3a and 10 μg/mL DKK1 (Catalog#10170-H08H).

**Background**

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

**Reference**
