

## DKK1 Protein, Mouse (HEK293, His)

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| <b>Cat. No.:</b>         | HY-P72969   |
| <b>Synonyms:</b>         | Dickkopf-related protein 1; Dickkopf-1; Dkk-1; SK; DKK1 |
| <b>Species:</b>          | Mouse   |
| <b>Source:</b>           | HEK293  |
| <b>Accession:</b>        | O54908 (T32-H272)                                       |
| <b>Gene ID:</b>          | 13380   |
| <b>Molecular Weight:</b> | Approximately 38.29 kDa                                 |

### PROPERTIES

|                                |  |
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| <b>AA Sequence</b>             | <p>           T L N S V L I N S N    A I K N L P P P L G    G A G G Q P G S A V    S V A P G V L Y E G<br/>           G N K Y Q T L D N Y    Q P Y P C A E D E E    C G S D E Y C S S P    S R G A A G V G G V<br/>           Q I C L A C R K R R    K R C M R H A M C C    P G N Y C K N G I C    M P S D H S H F P R<br/>           G E I E E S I I E N    L G N D H N A A A G    D G Y P R R T T L T    S K I Y H T K G Q E<br/>           G S V C L R S S D C    A A G L C C A R H F    W S K I C K P V L K    E G Q V C T K H K R<br/>           K G S H G L E I F Q    R C Y C G E G L A C    R I Q K D H H Q A S    N S S R L H T C Q R<br/>           H         </p> |
| <b>Biological Activity</b>     | Measured by its ability to inhibit recombinant rmWnt3a induced alkaline phosphatase production by C3H10T 1/2 cells and the ED <sub>50</sub> is 0.05-0.3 µg/mL.   |
| <b>Appearance</b>              | Lyophilized powder.  |
| <b>Formulation</b>             | Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4 (Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.) or 20 mM PB, 150 mM NaCl, pH 7.4.   |
| <b>Endotoxin Level</b>         | <1 EU/µg, determined by LAL method.  |
| <b>Reconstitution</b>          | It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.  |
| <b>Storage &amp; Stability</b> | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.   |
| <b>Shipping</b>                | Room temperature in continental US; may vary elsewhere.  |

### DESCRIPTION

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| <b>Background</b> | DKK1 protein serves as a potent antagonist of canonical Wnt signaling through multiple mechanisms, including inhibiting the interaction between LRP5/6 and Wnt and forming a ternary complex with the transmembrane protein KREMEN, which |
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facilitates the internalization of LRP5/6. Additionally, DKK1 exhibits Wnt-independent anti-apoptotic activity by inhibiting the pro-apoptotic function of KREMEN1. In limb development, DKK1 plays a crucial role by attenuating Wnt signaling, contributing to normal limb patterning. The protein's interactions with LRP5, LRP6, and KREM1, especially in the presence of MESD, highlight its involvement in the intricate regulation of Wnt-mediated signaling pathways, underscoring its significance in various cellular processes and developmental contexts.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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