

Rev03 DATASHEET

Update: Dec,14,2021

DKK-1, Mouse

Cat. No.: Z03289

Product Introduction

Species	Mouse
Protein Construction	DKK-1 (Ser30-His272) Accession # 054908
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	$<$ 0.2 EU/ μg of protein by gel clotting method
Biological Activity	ED_{50} < 6.0 $\mu g/ml,$ measured in stimulation of alkaline phosphatase activity using CCl-226 cells.
Expression System	СНО
Apparent Molecular Weight	19~20 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background: Dickkopf related protein 1 (DKK-1) 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. DKK-1 promotes LRP6 internalization and degradation as it forms a ternary complex with the cell surface receptor Kremen. DKK-1 not only functions in head formation during development, but also regulates joint remodeling and bone formation indicating its potential role in the pathogenesis of rheumatoid arthritis and multiple myeloma.



Synonyms: Dickkopf-1; DKK-1

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