Recombinant Swine IL-4 protein(His Tag)

Catalog Number: PKSS000004

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*
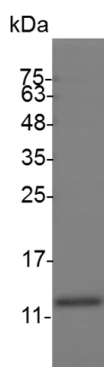
Description

Species	Porcine
Source	E.coli-derived Porcine IL-4 protein His 25-Cys 133, with an C-terminal His
Calculated MW	13.5 kDa
Observed MW	15 kDa
Accession	Q04745
Bio-activity	Measure by its ability to induce proliferation in TF-1 cells.The ED_{50} for this effect is <0.6 ng/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data

> 98 % as determined by reducing SDS-PAGE.

Background

Interleukin-4 (IL-4) is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation; survival and gene expression. IL-4 is produced by mast cells; T cells; and bone marrow stromal cells. IL-4 regulates the differentiation of naive CD4+ T cells into helper Th2 cells; characterized by their cytokine-secretion profile that includes secretion of IL-4; IL-5; IL-6; IL-10; and IL-13; which favor a humoral immune response. Another dominant function of IL-4 is the regulation of immunoglobulin class switching to the IgGl and IgE isotypes. Excessive IL-4 production by Th2 cells has been associated with elevated IgE production and allergic response.