Recombinant Swine IL-8 protein(His Tag)

Catalog Number: PKSS000006

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

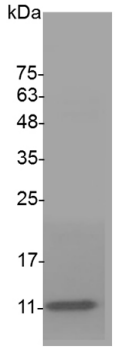
Description

Species	Porcine
Source	E.coli-derived Porcine IL-8 protein Ala 26-Gln 103, with an C-terminal His
Calculated MW	10.0 kDa
Observed MW	11 kDa
Accession	P26894
Bio-activity	Measure by its ability to chemoattract BaF3 cells transfected with human CXCR2.The ED_{50} for this effect is <5 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



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Background

Interleukin 8 (IL-8), also known as CXCL8, which is a chemokine with a defining CXC amino acid motif that was initially characterized for its leukocyte chemotactic activity, is now known to possess tumorigenic and proangiogenic properties as well. This chemokine is secreted by a variety of cell types including monocyte/macrophages, T cells, neutrophils, fibroblasts, endothelial cells, and various tumor cell lines in response to inflammatory stimuli. In human gliomas, IL-8 is expressed and secreted at high levels both in vitro and in vivo, and recent experiments suggest it is critical to glial tumor neovascularity and progression. Levels of IL-8 correlate with histologic grade in glial neoplasms, and the most malignant form, glioblastoma, shows the highest expression in pseudopalisading cells around necrosis, suggesting that hypoxia/anoxia may stimulate expression. Accumulating evidence has demonstrated that various types of cells can produce a large amount of IL-8/CXCL8 in response to a wide variety of stimuli, including proinflammatory cytokines, microbes and their products, and environmental chang. Numerous observations have established IL-8/CXCL8 as a key mediator in neutrophil-mediated acute inflammation due to its potent actions on neutrophils. The discovery of these biological functions suggests that IL-8/CXCL8 has crucial roles in various pathological conditions such as chronic inflammation and cancer.