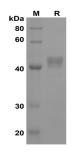
## Recombinant Rat IL-17A Protein(hlgG1 Fc Tag)

### Catalog Number: PDMR100101

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

Description	
Species	Rat
Source	Mammalian-derived Rat IL-17A protein Ala18-Ser150, with an C-terminal hIgG1 Fc
Calculated MW	39.5 kDa
Observed MW	40-45 kDa
Accession	Q61453
Bio-activity	Not validated for activity
Properties	
Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

#### Data



SDS-PAGE analysis of Rat IL-17A proteins,2µg/lane of Recombinant Rat IL-17A proteins,was resolved with SDS-PAGE under reducing conditions,showing bands at 40-45 KD

#### Background

# **Elabscience**®

IL17, also known as IL17a, is a cytokine that belongs to the IL-17 family. Cytokines are proteinaceous signaling compounds that are major mediators of the immune response. They control many different cellular functions including proliferation, differentiation, and cell survival/apoptosis but are also involved in several pathophysiological processes including viral infections and autoimmune diseases. Cytokines are synthesized under various stimuli by a variety of cells of both the innate(monocytes, macrophages, dendritic cells) and adaptive(T- and B-cells) immune systems. The IL-17 family of cytokines includes six members, IL-17/IL-17A, IL-17B, IL-17C, IL-17D, IL-17E/IL-25, and IL-17F, which are produced by multiple cell types. IL-17 regulates the activities of NF-kappaB and mitogen-activated protein kinases. This cytokine can stimulate the expression of IL6 and cyclooxygenase-2(PTGS2/COX-2), as well as enhance the production of nitric oxide(NO). High levels of IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis, and multiple sclerosis.