

## Recombinant Rat IL-17A Protein(hIgG1 Fc Tag)

Catalog Number: PDMR100101

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

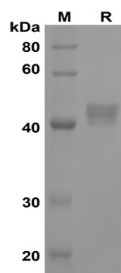
### Description

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°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm 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, 2 µg/lane of Recombinant Rat IL-17A proteins, was resolved with SDS-PAGE under reducing conditions, showing bands at 40-45 KD

### Background

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.