## Recombinant Human IL-28A protein(His Tag)

## Catalog Number: PKSH034112

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

Description	
Species	Human
Source	E.coli-derived Human IL-28A protein Pro 27-Val 200, with an C-terminal His
Calculated MW	20.6 kDa
Observed MW	20 kDa
Accession	Q8IZJ0
Bio-activity	Measure by its ability to protect HepG2 cells infected with encephalomyocarditis
	(EMC) virus. The $ED_{50}$ for this effect is <20 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
	°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 sterile PBS,pH 8.0.
	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.
Background	

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IL-28A (Interferon- $\lambda 2$ ,IFN- $\lambda 2$ ), IL-28B/IFN- $\lambda 3$ , and IL-29/IFN- $\lambda 1$  are type III interferons which are distantly related to IL-10 family and type I IFN family cytokines. Mature human IL-28A is an approximately 22-25 kDa protein that shares 66% amino acid (aa) sequence identity with mouse and rat IL-28A and shows cross-species activity. It shares 96% and 70% aa sequence identity with human IL-28B and IL-29, respectively. IL-28A promotes the Th1 polarization of dendritic cells in the airway and inhibits Th2 and Th17 mediated inflammation. IL-28A additionally exhibits anti-tumor activity, in part by enhancing IL-12 dependent anti-tumor CTL responses in vivo. In contrast, it is up-regulated in invasive bladder cancer where it promotes tumor cell migration.