# **Elabscience**®

# Recombinant Rat IL7 Protein(Trx Tag)

## Catalog Number: PDER100110

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

Description			
Species	Rat		
Source	E.coli-derived Rat IL7 protein Asp26-Thr154, with an N-terminal Trx		
Calculated MW	34.1 kDa		
Observed MW	35 kDa		
Accession	P56478		
Bio-activity	Not validated for activity		
Properties			
Purity	> 90% as determined by reducing SDS-PAGE.		
Endotoxin	< 10 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 $\mu$ 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

kDa 80	м	R
60	_	
40	-	
30	-	-
20	-	

SDS-PAGE analysis of Rat IL7 proteins, 2 µg/lane of Recombinant Rat IL7 proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 34.1 KD

#### Background

IL7, also known as interleukin 7, is a hematopoietic growth factor that belongs to the IL-7/IL-9 family. It is secreted by stromal cells in the bone marrow and thymus. IL7 stimulates the proliferation of lymphoid progenitors. It is important for proliferation during certain stages of B-cell maturation. IL7 and the hepatocyte growth factor (HGF) form a heterodimer that functions as a pre-pro-B cell growth-stimulating factor. It is found to be a cofactor for V(D)J rearrangement of the T cell receptor beta (TCRB) during early T cell development. IL7 can be produced locally by intestinal epithelial and epithelial goblet cells and may serve as a regulatory factor for intestinal mucosal lymphocytes.