## Recombinant Mouse IFNA2 Protein(Trx Tag)

## Catalog Number: PDEM100142

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

Description			
Species	Mouse		
Source	E.coli-derived Mouse IFNA2 protein Cys24-Glu190, with an N-terminal Trx		
Calculated MW	38 kDa		
Observed MW	35 kDa		
Accession	P01573		
<b>Bio-activity</b>	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	rage Generally, lyophilized proteins are stable for up to 12 months when stored at -2		
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots o		
	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.		
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Data

kDa	м	R
80 60	-	
40	-	
30	_	-
20		

SDS-PAGE analysis of Mouse IFNA2 proteins, 2 µg/lane of Recombinant Mouse IFNA2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 38 KD

Background

## **Elabscience**®

Interferon-alpha 2 (IFN alpha-2) is one of 14 subtypes within the IFN-alpha class of Type I Interferons. The members of the IFN-alpha class, also known as alpha leukocyte interferons, encompass a group of distinct but closely related proteins which share approximately 80% amino acid (aa) sequence identity and have a similar globular structure composed of five alpha-helices. IFN-alpha class members signal through a common cell surface receptor complex composed of IFN-alpha R2 and IFN-alpha R1 subunits. As the first highly active IFN to be cloned and produced, IFN alpha-2 has become the prototypic IFN for academic and pharmaceutical research. The mature extracellular domain (ECD) of Mouse IFN alpha-2 shares 60% and 83% as sequence identity with Human and rat, respectively. Murine IFN-alpha 2 can eliminate cardiac viral load and protect cardiomyocytes from injury in animals infected with coxsackievirus B3 (CVB 3). IFN alpha-2 derived mutants with reduced IFNR2 binding inhibited HIV replication and mutants with more IFNAR1 binding potentiated antiviral activity.