

## Product datasheet for TP501242

### Isg15 (NM\_015783) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse ISG15 ubiquitin-like modifier (Isg15), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR201242 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MAWDLKVKMLGGNDFLVSVTNSMTVSELKKQIAQKIGVPAFQQRLAHQTAVLQDGLTLSSLGLGPSSTVM  
LVQNCSEPLSILVRNERGHSNIYEVFLTQTVDTLKKKVSQREQVHEDQFWLSFEGRPMEKELLGEYGL  
KPQCTVIKHLRLRGGGGDQCA

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-MYC/DDK
Predicted MW:	17.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_056598</a></u>
Locus ID:	100038882
UniProt ID:	<u><a href="#">Q64339</a></u> , <u><a href="#">Q4FJR9</a></u>
RefSeq Size:	756
Cytogenetics:	4



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RefSeq ORF: 486

Synonyms: 100038882; G1p2; IGI15; IP17; Irfp; UCRP

**Summary:** Ubiquitin-like protein which plays a key role in the innate immune response to viral infection either via its conjugation to a target protein (ISGylation) or via its action as a free or unconjugated protein. ISGylation involves a cascade of enzymatic reactions involving E1, E2, and E3 enzymes which catalyze the conjugation of ISG15 to a lysine residue in the target protein. Its target proteins include SERPINA3G/SPI2A, JAK1, MAPK3/ERK1, PLCG1, TRIM25, STAT5A, MAPK1/ERK2 and globin. Can also isgylate: DDX58/RIG-I which inhibits its function in antiviral signaling response and EIF4E2 which enhances its cap structure-binding activity and translation-inhibition activity. Exhibits antiviral activity towards both DNA and RNA viruses, including influenza A and B virus, sindbis virus (SV) and herpes simplex type-1 (HHV-1). Plays a significant role in the control of neonatal Chikungunya virus (CHIKV) infection by acting as a putative immunomodulator of proinflammatory cytokines. Protects mice against the consequences of Chikungunya virus infection by downregulating the pathogenic cytokine response, often denoted as the cytokine storm. Plays a role in erythroid differentiation. The secreted form of ISG15 can: induce natural killer cell proliferation, act as a chemotactic factor for neutrophils and act as a IFN-gamma-inducing cytokine playing an essential role in antimycobacterial immunity. The secreted form acts through the integrin ITGAL/ITGB2 receptor to initiate activation of SRC family tyrosine kinases including LYN, HCK and FGR which leads to secretion of IFNG and IL10; the interaction is mediated by ITGAL (By similarity).  
[UniProtKB/Swiss-Prot Function]