

For Research Use Only, Not for use in diagnostic procedures

**Mouse ISG15**  
**Mouse, recombinant protein expressed in *E. coli*.**

Cat# CY-R2274

Amount: 100 µg (1 µg/µl x 100µl)  
Lot:**Introduction:**

ISG15 (Interferon (IFN)-Stimulated Gene 15) is a ubiquitin-like protein containing two ubiquitin homology domains and becomes conjugated to a variety of proteins when cells are treated with type I interferon or lipopolysaccharide. Therefore this modification (so called, ISGylation) appear to be involved in type I interferon signal transduction. Unlike ubiquitylation, ISGylation does not drive protein degradation (regulated by K48-linked ubiquitin). ISG15 is expressed as a 165 amino acid precursor that is subsequently processed to expose the C-terminal sequence LRLRGG. Like ubiquitin, this C-terminal diglycine residue is adenylated and conjugated by a thiolester bond to sequential cysteine residues on the E1-activating, E2-carrier and E3-ligase enzymes, before being transferred to lysine residues on target protein substrates.

ISG15 can also be found extracellularly in an unconjugated form. Human lymphocytes and monocytes were reported to release free ISG15 following treatment with IFN-β. More than 50% of the total ISG15 could be detected in the culture medium 24 hours following IFN stimulation. In addition, ISG15 is highly elevated and extensively conjugated to cellular proteins in many tumors and tumor cell lines. The increased levels of ISG15 in tumor cells were found to be associated with decreased levels of polyubiquitinated proteins.

**Product Description:**

Full length of mouse ISG15, containing an N-terminal GST tag, expressed in *E. coli*. and purified by GSH agarose chromatography.

**Gene Information:**

The gene accession number is NM\_015783.3

**Gene Aliases:**

ISG15 (G1P2, IFI15)

**Formulation:**

Recombinant mouse ISG15 is supplied frozen in phosphate buffered saline (PBS) containing 10% glycerol.

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Recombinant mouse ISG15 demonstrates approximately 42kDa band by SDS-PAGE analysis. (CBB staining)

97 —

66 —

45 —

31 —

Purity is over 90% estimated by SDS-PAGE analysis.

**Storage:**

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, AVOID REPEATED HANDLING AND MULTIPLE FREEZE/THAW CYCLES.

**Stability:**

Unopened vial at -70°C, for 1 year after delivery.

**References:**

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**Related Products**

- \* **CircuLex Human ISG15 ELISA Kit: Cat# CY-8085**
- \* **CircuLex Mouse ISG15 ELISA Kit: Cat# CY-8091**
  
- \* **Human ISG15: Cat# CY-R2272**
- \* **Mouse ISG15: Cat# CY-R2274**

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