



# Recombinant Protein Technical Manual

## Recombinant Human AIM2 Protein (GST Tag)(Active)

RPES0385

### Product Data:

**Product SKU:** RPES0385

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** NP\_004824.1

### Protein Information:

**Molecular Mass:** 65.2 kDa

**AP Molecular Mass:** 65.2 kDa

**Tag:** N-GST

**Bio-activity:** Measured by its ability to inhibit the proliferation of MCF7 human breast adenocarcinoma cells. The ED50 for this effect is typically 10-40ug/ml.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 sterile 50mM Tris, 1M NaCl, 0.5mM PMSF, 5mM GSH, pH 8.0

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** PYHIN4

## Immunogen Information:

**Sequence:** Met 1-Thr 343

## Background:

AIM2, Absent In Melanoma 2 is a member of the interferon-inducible HIN-200 protein family that contains an amino-terminal pyrin domain and a carboxy-terminal oligonucleotide/oligosaccharide-binding domain, senses cytoplasmic DNA by means of its oligonucleotide/oligosaccharide-binding domain and interacts with ASC (apoptosis-associated speck-like protein containing a CARD) through its pyrin domain to activate caspase. In response to foreign cytoplasmic DNA, AIM2 forms an inflammasome, resulting in caspase activation in inflammatory cells. It had been pointed to a role of AIM2 function in both inflammation and cancer. AIM-2 antigen is expressed in a wide variety of tumor types, including neuroectodermal tumors, as well as breast, ovarian and colon carcinomas. AIM-2 could be used as a tumor antigen target for monitoring vaccine trials or to develop antigen specific active immunotherapy for glioma patients.