



Recombinant Protein Technical Manual  
Recombinant Human NAALADL1 Protein (His Tag)  
RPES1876

### Product Data:

**Product SKU:** RPES1876

**Size:** 20µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_005459.2

### Protein Information:

**Molecular Mass:** 80 kDa

**AP Molecular Mass:** 90 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 97 % 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 PBS, pH 7.4

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

**Application:**

**Synonyms:** I100;NAALADASEL;NAALADL1

## Immunogen Information:

**Sequence:** Pro 29-Leu 740

## Background:

N-acetylated-alpha-linked acidic dipeptidase-like protein, also known as NAALADL1, NAALADase L, and Ileal dipeptidylpeptidase, is a Single-pass type I I membrane protein and a member of the peptidase M28 family and M28B subfamily. NAALADase L is mainly expressed in the distal small intestine. It is also expressed in the spleen and testis and Weakly expressed in the brain, locating mainly to the brain stem, amygdala, thalamus and ventral striatum. NAALADase L is a chloride-activated, membrane bound, metallopeptidase that cleaves the endogenous neuropeptide N-acetyl-aspartyl-glutamate (NAAG). NAAG acts as a partial NMDA agonist as well as a full agonist at the presynaptic metabotropic glutamate receptor 3 (mGluR3), where it acts to reduce glutamate release. NAALADase L also exhibits a dipeptidyl-peptidase IV type activity. NAALADase inhibition may be a novel therapeutic approach to reduce or inhibit heightened aggressiveness, and possibly to treat aggressive behavior associated with psychiatric disorders.