



Recombinant Protein Technical Manual

Recombinant Human NTPDase 2/ENTPD2 Protein (aa 29-460, His Tag)(Active) RPES0213

Product Data:

Product SKU: RPES0213

Size: 10µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q9Y5L3

Protein Information:

Molecular Mass: 49.3 kDa

AP Molecular Mass: 59 kDa

Tag: N-His

Bio-activity: Measured by its ability to hydrolyze the 5'phosphate groups from the substrate adenosine 5'triphosphate(ATP). The specific activity is > 5,000 pmoles/min/µg.

Purity: > 85 % 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 20mM Tris, 500mM NaCl, pH 7.4

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

Application:

Synonyms: CD39L1;NTPDase-2;RP11-229P13.11-001

Immunogen Information:

Sequence: Thr 29-Asp460

Background:

NTPDase 2, also known as ENTPD2, belongs to the ecto-nucleoside triphosphate diphosphohydrolase family (E-NTPDase). Members of E-NTPDase family are nucleotidases able to hydrolyze 5'-nucleoside tri- and/or diphosphates; the main role of these enzymes is the termination of purinergic signaling. NTPDases are ubiquitous and were previously shown in other parasites including the trypanosomatides of genus *Leishmania* and in *T. brucei*. NTPase activity would act as a timer and is crucial to *T. gondii* infection. In *L. pneumophila* it was demonstrated that an E-NTPDase, similar to CD39, is essential for intracellular bacterial multiplication. NTPDase 2 is an integral membrane protein. In the nervous system, it could hydrolyze ATP and other nucleotides to regulate purinergic neurotransmission. Alternative splicing of NTPDase 2 gene results in multiple transcript variants.