

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

Catalog No. PKSH031019

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

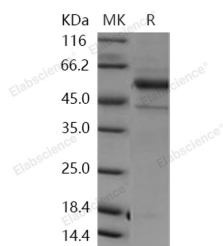
### Description

|                                    |                                     |
|------------------------------------|-------------------------------------|
| <b>Synonyms</b>                    | CD39L1;NTPDase-2;RP11-229P13.11-001 |
| <b>Species</b>                     | Human                               |
| <b>Expression Host</b>             | Baculovirus-Insect Cells            |
| <b>Sequence</b>                    | Thr 29-Asp460                       |
| <b>Accession</b>                   | Q9Y5L3                              |
| <b>Calculated Molecular Weight</b> | 49.3 kDa                            |
| <b>Observed molecular weight</b>   | 59 kDa                              |
| <b>Tag</b>                         | N-His                               |
| <b>Bioactivity</b>                 | Not validated for activity          |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 85 % as determined by reducing SDS-PAGE.   |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.  |
| <b>Storage</b>        | Generally, 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.        |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.  |
| <b>Formulation</b>    | Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.   |

### Data



> 85 % as determined by reducing SDS-PAGE.

### 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

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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.