

LAP3 Protein, Human (HEK293, His)

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| Cat. No.: | HY-P74780 |
| Synonyms: | Cytosol aminopeptidase; LAP-3; Peptidase S; LAP3; LAPEP; PEPS |
| Species: | Human |
| Source: | HEK293 |
| Accession: | P28838/NP_056991.2 (M1-A519) |
| Gene ID: | 51056 |
| Molecular Weight: | Approximately 57.6 kDa |

PROPERTIES

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| Biological Activity | The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet. |
| Appearance | Lyophilized powder. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of 20 mM Tris, 500 mM NaCl, 20% Glycerol, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. |
| Endotoxin Level | <1 EU/µg, determined by LAL method. |
| Reconstitution | It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. |
| Storage & Stability | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage. |
| Shipping | Room temperature in continental US; may vary elsewhere. |

DESCRIPTION

Background

Leucine aminopeptidase 3 (LAP3) is a cytosolic metallopeptidase crucial for catalyzing the removal of unsubstituted N-terminal hydrophobic amino acids from various peptides. The enzymatic activity of LAP3 is contingent upon the presence of Zn(2+) ions, and the association with other cofactors can modulate its substrate specificity. In the presence of Mn(2+), LAP3 exhibits a specific Cys-Gly hydrolyzing activity, targeting Cys-Gly-S-conjugates. This peptidase is notably involved in the metabolism of glutathione and the degradation of glutathione S-conjugates, suggesting a role in regulating the cellular redox status. The diverse substrate specificity and involvement in cellular processes underscore the significance of LAP3 in peptide metabolism and cellular redox control.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA