

Product Data Sheet

Leukotriene A4 Hydrolase/LTA4H Protein, Mouse (sf9, His)

Cat. No.:	HY-P74776
Synonyms:	Leukemia inhibitory factor; Leukotriene A-4 hydrolase; LTA-4 hydrolase; LTA4H
Species:	Mouse
Source:	Sf9 insect cells
Accession:	P24527 (M1-D611)
Gene ID:	16993
Molecular Weight:	Approximately 62 kDa

DDODEDTIES	
PROPERTIES	
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 50 mM Tris, 100 mM NaCl, pH 8.0. 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.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH_2O.
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

BackgroundThe Leukotriene A4 Hydrolase/LTA4H protein is a bifunctional zinc metalloenzyme with both epoxide hydrolase (EH) and
aminopeptidase activities. Serving as an epoxide hydrolase, it catalyzes the conversion of leukotriene A4 (LTA4) to the pro-
inflammatory mediator leukotriene B4 (LTB4). Additionally, LTA4H exhibits aminopeptidase activity, displaying a high
affinity for N-terminal arginines in various synthetic tripeptides. Beyond its pro-inflammatory EH role, the protein may
counteract inflammation through its aminopeptidase activity, which cleaves the neutrophil attractant tripeptide Pro-Gly-
Pro (PGP)—a bioactive collagen fragment generated by matrix metalloproteinase-9 (MMP9) and prolylendopeptidase
(PREPL). Moreover, LTA4H participates in the biosynthesis of resolvin E1 and 18S-resolvin E1 from eicosapentaenoic acid,
contributing to the generation of lipid mediators with potent anti-inflammatory and pro-resolving actions. The multifaceted
activities of LTA4H highlight its intricate involvement in the regulation of inflammatory processes and lipid mediator
biosynthesis.

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