Data Sheet (Cat.No.TMPY-03553)

TargetMol

15 Lipoxygenase 2 Protein, Human, Recombinant

General Information

Synonyms:	arachidonate 15-lipoxygenase, type B;ALOX15B;15-LOX-2
Protein Construction:	A DNA sequence encoding the human ALOX15B (AAH35217.1)(Met1-Ile676) was expressed and purified with two additional amino acids (Gly & Pro) at the N-terminus. Predicted N terminal: Gly
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	AAH35217.1
Molecular Weight:	76 kDa (predicted); 62-66 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, 10% glycerol, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

ALOX15B is a member of the lipoxygenase family of structurally related nonheme iron dioxygenases involved in the production of fatty acid hydroperoxides. ALOX15B converts arachidonic acid exclusively to 15S-hydroperoxyeicosatetraenoic acid, while metabolizing linoleic acid less effectively. ALOX15B gene is located in a cluster of related genes and a pseudogene that spans approximately 1 kilobases on the short arm of chromosome

17. Alternatively spliced transcript variants encoding different isoforms have been described.

Reference

Kilty I. et al., 2000, Eur J Biochem. 266 (1): 83-93.
Sigal E. et al., 1990, J Biol Chem. 265 (9): 5113-20.
Brash AR. et al., 1997, Proc Natl Acad Sci. 94 (12): 6148-52.

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