

PRODUCT INFORMATION



Arachidonate 15-Lipoxygenase (soybean) - Purified

Item No. 60700

Overview and Properties

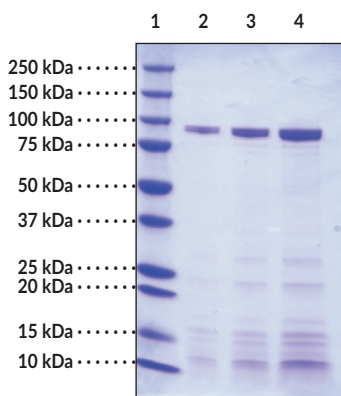
Synonyms: 13-S-Lipoxygenase-1, 15-Lipoxygenase, Lipoxygenase Lx3
Source: Soybeans (Provar)
Uniprot Nos.: B3TDK6, P08170
Molecular Weight: 94 and 97 kDa
Storage: -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein
Stability: ≥1 year
Purity: ≥50% (estimated by SDS-PAGE)
Supplied in: 100 mM Tris, pH 7.0, 10% glycerol

Protein

Concentration: *batch specific* mg/ml
Activity: *batch specific* U/ml
Specific Activity: *batch specific* U/mg
Unit Definition: One unit of enzyme causes an increase of 0.001 absorbance units at 234 nm when incubated with 7 μM linoleate at 25°C in 0.1 M borate buffer, pH 9.0, in a total volume of 1.0 ml. Lipoxygenase activity quantified spectrophotometrically.

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: Arachidonate 15-Lipoxygenase (soybean) (1 μg)
Lane 3: Arachidonate 15-Lipoxygenase (soybean) (2 μg)
Lane 4: Arachidonate 15-Lipoxygenase (soybean) (4 μg)

Representative gel image shown; actual purity may vary between each batch.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

This product contains primarily 13-S-lipoxygenase-1 and lipoxygenase Lx3 which are non-heme, non-sulfur ferropoteins, that are 94 and 97 kDa, respectively. 13-S-Lipoxygenase is referred to as a type-1 enzyme and exhibits maximum catalytic activity at pH 9.0.^{1,2} The substrate specificity of this product is linoleate>arachidonate>eicosapentaenoate.

References

1. Funk, M.O., Carroll, R.T., Thompson, J.F., *et al.* The lipoxygenases in developing soybean seeds, their characterization and synthesis *in vitro*. *Plant Physiol.* **82**, 1139-1144 (1986).
2. Draheim, J.E., Carroll, R.T., McNemar, T.B., *et al.* Lipoxygenase isoenzymes: A spectroscopic and structural characterization of soybean seed enzymes. *Arch. Biochem. Biophys.* **269**, 208-218 (1989).

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