

## Lysosomal acid lipase/cholesteryl ester hydrolase (LIPA) Recombinant Protein | LIPA recombinant protein

Recombinant Human Lysosomal acid lipase/cholesteryl ester hydrolase (LIPA)

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| CATALOG #<br><b>AAA18510</b> | HOST<br><b>E Coli or Yeast or Baculovirus or Mammalian Cell</b> |
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### PRODUCT SYNONYMS

Lysosomal acid lipase/cholesteryl ester hydrolase (LIPA); Recombinant Human Lysosomal acid lipase/cholesteryl ester hydrolase (LIPA); Cholesteryl esterase; Lipase A; Sterol esterase; LIPA recombinant protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Host                    | E Coli or Yeast or Baculovirus or Mammalian Cell                                                                                                                                                                                                                                                                                                                                                                                             |
| Purity/Purification     | Greater or equal to 85% purity as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                    |
| Form/Format             | Lyophilized or liquid (Format to be determined during the manufacturing process)                                                                                                                                                                                                                                                                                                                                                             |
| Sequence Positions      | 22-399aa; Full Length of Mature Protein                                                                                                                                                                                                                                                                                                                                                                                                      |
| Sequence                | SGGKLTAVDP ETNMNVSEII SYWGFPSEEEY LVETEDGYIL CLNRIPHGRK NHSDKGPKPV VFLQHGLLAD<br>SSNWVTNLN SSLGFILADA GFDVWMGNSR GNTWSRKHKT LSVSQDEFWA FSYDEMAKYD LPASINFILN<br>KTGQEQVYYV GHSQGTIGF IAFSQIPELA KRIKMFFALG PVASVAFCTS PMAKLGRLPD HLIKDLFGDK<br>EFLPQSAFLK WLGTHVCTHV ILKELCGNLC FLLCGFNERN LNMSRVDVYT THSPAGTSVQ NMLHWSQAVK<br>FQKFQAFDWG SSAKNYFHYN QSYPTYNVK DMLVPTAVWS GGHDWLADVY DVNILLTQIT NLVFHESIPE<br>WEHLDFIWGL DAPWRLYNKI INLMRKYQ |
| Preparation and Storage | Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.                                                                                                                                                                                                                                                                                                                                                       |

### IMAGES



#### SDS-PAGE

SDS-PAGE of mammalian cell derived, His-tagged human LIPA recombinant protein

### ADDITIONAL INFORMATION

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| <b>Related Product Information for LIPA recombinant protein</b> | Crucial for the intracellular hydrolysis of cholesteryl esters and triglycerides that have been internalized via receptor-mediated endocytosis of lipoprotein particles. Important in mediating the effect of LDL (low density lipoprotein) uptake on suppression of hydroxymethylglutaryl-CoA reductase and activation of endogenous cellular cholesteryl ester formation. |
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| Product Categories/Family for LIPA recombinant protein | Metabolism                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| References                                             | <p>Cloning and expression of cDNA encoding human lysosomal acid lipase/cholesteryl ester hydrolase. Similarities to gastric and lingual lipases.Anderson R.A., Sando G.N.J. Biol. Chem. 266:22479-22484(1991) Purification, characterization and molecular cloning of human hepatic lysosomal acid lipase.Ameis D., Merkel M., Eckerskorn C., Greten H.Eur. J. Biochem. 219:905-914(1994) Tissue and cellular specific expression of murine lysosomal acid lipase mRNA and protein.Du H., Witte D.P., Grabowski G.A.J. Lipid Res. 37:937-949(1996) Complete sequencing and characterization of 21,243 full-length human cDNAs.Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R., Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S., Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M., Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Fujimori K., Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S., Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T., Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O., Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M., Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S., Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S., Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O., Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B., Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y., Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T., Ono T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y., Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M., Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T., Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K., Okumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashita R., Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.Nat. Genet. 36:40-45(2004) Suzuki Y., Sugano S., Totoki Y., Toyoda A., Takeda T., Sakaki Y., Tanaka A., Yokoyama S. The DNA sequence and comparative analysis of human chromosome 10.Deloukas P., Earthrowl M.E., Grafham D.V., Rubenfield M., French L., Steward C.A., Sims S.K., Jones M.C., Searle S., Scott C., Howe K., Hunt S.E., Andrews T.D., Gilbert J.G.R., Swarbreck D., Ashurst J.L., Taylor A., Battles J., Bird C.P., Ainscough R., Almeida J.P., Ashwell R.I.S., Ambrose K.D., Babbage A.K., Bagguley C.L., Bailey J., Banerjee R., Bates K., Beasley H., Bray-Allen S., Brown A.J., Brown J.Y., Burford D.C., Burrill W., Burton J., Cahill P., Camire D., Carter N.P., Chapman J.C., Clark S.Y., Clarke G., Clee C.M., Clegg S., Corby N., Coulson A., Dhami P., Dutta I., Dunn M., Faulkner L., Frankish A., Frankland J.A., Garner P., Garnett J., Gribble S., Griffiths C., Grocock R., Gustafson E., Hammond S., Harley J.L., Hart E., Heath P.D., Ho T.P., Hopkins B., Horne J., Howden P.J., Huckle E., Hynds C., Johnson C., Johnson D., Kana A., Kay M., Kimberley A.M., Kershaw J.K., Kokkinaki M., Laird G.K., Lawlor S., Lee H.M., Leongamornlert D.A., Laird G., Lloyd C., Lloyd D.M., Loveland J., Lovell J., McLaren S., McLay K.E., McMurray A., Mashreghi-Mohammadi M., Matthews L., Milne S., Nickerson T., Nguyen M., Overton-Larty E., Palmer S.A., Pearce A.V., Peck A.I., Pelan S., Phillimore B., Porter K., Rice C.M., Rogosin A., Ross M.T., Sarafidou T., Sehra H.K., Shownkeen R., Skuce C.D., Smith M., Standring L., Sycamore N., Tester J., Thorpe A., Torcasso W., Tracey A., Tromans A., Tsolas J., Wall M., Walsh J., Wang H., Weinstock K., West A.P., Willey D.L., Whitehead S.L., Wilming L., Wray P.W., Young L., Chen Y., Lovering R.C., Moschonas N.K., Siebert R., Fechtel K., Bentley D., Durbin R.M., Hubbard T., Doucette-Stamm L., Beck S., Smith D.R., Rogers J.Nature 429:375-381(2004)</p> |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                |
|----------------------------------|----------------------------------------------------------------|
| NCBI GI #                        | 51317399                                                       |
| NCBI GeneID                      | 3988                                                           |
| NCBI Accession #                 | NP_000226.2                                                    |
| NCBI GenBank Nucleotide #        | NM_000235.3                                                    |
| UniProt Accession #              | P38571; Q16529; Q53H21; Q5T074; Q5T771; Q96EJ0; B2RBH5; D3DR29 |
| Molecular Weight                 | 45 kDa                                                         |
| NCBI Official Full Name          | lysosomal acid lipase/cholesteryl ester hydrolase isoform 1    |
| NCBI Official Synonym Full Names | lipase A, lysosomal acid type                                  |
| NCBI Official Symbol             | LIPA                                                           |
| NCBI Official Synonym Symbols    | LAL; CESD                                                      |

|                            |                                                   |
|----------------------------|---------------------------------------------------|
| NCBI Protein Information   | lysosomal acid lipase/cholesteryl ester hydrolase |
| UniProt Protein Name       | Lysosomal acid lipase/cholesteryl ester hydrolase |
| UniProt Gene Name          | <b>LIPA</b>                                       |
| UniProt Synonym Gene Names | Acid cholesteryl ester hydrolase; LAL             |
| UniProt Entry Name         | LICH_HUMAN                                        |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/lipa-recombinant-protein-e-coli/18510>