

Product datasheet

Anti-LCT antibody ab238593

1 Image

Overview

Product name	Anti-LCT antibody
Description	Rabbit polyclonal to LCT
Host species	Rabbit
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment corresponding to Human LCT aa 983-1252.

Sequence:

```
IFPTGRNSSINSHGVDYYNRLINGLVASNIFPMVTLFHWDLP
QALQDIGG
WENPALIDLFDSYADFCFQTFGDRVKFWMTFNEMYLAW
LGYSGGEFPPG
VKDPGWAPYRIAHAVIKAHARVYHTYDEKYRQEKGVISLS
LSTHWAEPK
SPGVPRDVEAADRMLQFSLGWFAHPIFRNGDYPDTMKW
KVGNRSELQHLA
TSRLPSFTEEEKRFIRATADVFLNTYYSRIVQHKTPRLNP
PSYEDDQEM AEEEDPSWPSTAMNRAAPWG
```

Database link: [P09848](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

Positive control IHC-P: Human lung cancer tissue.

General notes

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work

with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.03% Proclin 300
Purity	Protein G purified
Purification notes	Purity >95%.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab238593** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/20 - 1/200.

Target

Function	LPH splits lactose in the small intestine.
Tissue specificity	Intestine.
Involvement in disease	Defects in LCT are the cause of congenital lactase deficiency (COLACD) [MIM:223000]; also known as hereditary alactasia or disaccharide intolerance II. Congenital lactase deficiency is an autosomal recessive, rare and severe gastrointestinal disorder. It is characterized by watery diarrhea in infants fed with breast milk or other lactose-containing formulas. An almost total lack of LCT activity is found in jejunal biopsy material of patients with congenital lactase deficiency. Opposite to congenital lactase deficiency, adult-type hypolactasia, also known as lactose intolerance, is the most common enzyme deficiency worldwide. It is caused by developmental down-regulation of lactase activity during childhood or early adulthood. The decline of lactase activity is a normal physiological phenomenon; however, the majority of Northern Europeans have the ability to maintain lactase activity and digest lactose throughout life (lactase persistence). The down-regulation of lactase activity operates at the transcriptional level and it is associated with a

noncoding variation in the MCM6 gene, located in the upstream vicinity of LCT.

Sequence similarities

Belongs to the glycosyl hydrolase 1 family.

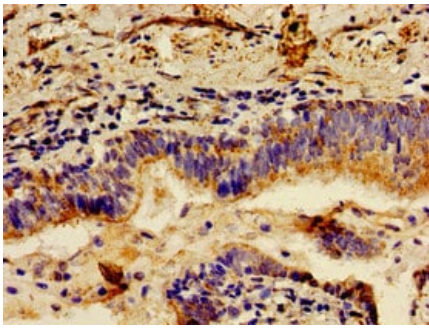
Domain

The sequence exhibits 4 regions (I-IV) of internal homology; therefore LPH might have evolved by two cycles of partial gene duplication.

Cellular localization

Apical cell membrane. Brush border.

Images



Paraffin-embedded human lung cancer tissue stained for LCT using ab238593 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LCT antibody (ab238593)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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