# abcam

## Product datasheet

## Anti-5 Lipoxygenase/5-LO antibody ab53514

## 1 Image

Overview

**Product name** Anti-5 Lipoxygenase/5-LO antibody

**Description** Goat polyclonal to 5 Lipoxygenase/5-LO

**Host species** Goat

**Tested applications** Suitable for: WB Species reactivity Reacts with: Rat

Predicted to work with: Mouse, Hamster

**Immunogen** Synthetic peptide corresponding to Human 5 Lipoxygenase/5-LO aa 651-666 (C terminal).

Sequence:

C-ERNKKKQLPYYYLSPD

Run BLAST with Run BLAST with

Positive control Recombinant Human 5 Lipoxygenase/5-LO protein (ab114310) can be used as a positive control

in WB. Rat stomach lysate or human bone marrow lysate.

**General notes** The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

**Properties** 

**Form** 

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

Storage buffer pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: 0.5% BSA, 0.5% Tris buffered saline

**Purity** Immunogen affinity purified

Clonality Polyclonal

Isotype ΙgG

## **Applications**

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab53514 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
WB		

#### **Application notes**

Peptide ELISA: antibody detection limit dilution 1:32,000.

WB: Use at a concentration of 0.3 - 1  $\mu$ g/ml. Detects a band of approximately 78 kDa (predicted molecular weight: 78 kDa).

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

## **Target**

**Function** Catalyzes the first step in leukotriene biosynthesis, and thereby plays a role in inflammatory

processes.

Pathway Lipid metabolism; leukotriene A4 biosynthesis.

**Sequence similarities** Belongs to the lipoxygenase family.

Contains 1 lipoxygenase domain.

Contains 1 PLAT domain.

Post-translational

modifications

Serine phosphorylation by MAPKAPK2 is stimulated by arachidonic acid. Phosphorylation on Ser-523 by PKA has an inhibitory effect. Phosphorylation on Ser-272 prevents export from the

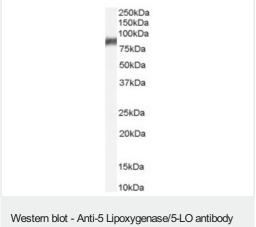
nucleus.

Cellular localization

Cytoplasm. Nucleus matrix. Nucleus membrane. Shuttles between cytoplasm and nucleus. Found exclusively in the nucleus, when phosphorylated on Ser-272. Calcium binding promotes translocation from the cytosol and the nuclear matrix to the nuclear envelope and membrane

association.

## **Images**



Anti-5 Lipoxygenase/5-LO antibody (ab53514) at 0.3  $\mu$ g/ml + Rat Stomach lysate (35 $\mu$ g protein in RIPA buffer).

**Predicted band size:** 78 kDa **Observed band size:** 78 kDa

Primary incubation was 1 hour. Detected by chemiluminescence.

Western blot - Anti-5 Lipoxygenase/5-LO antibody (ab53514)

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
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- 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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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