

## Product datasheet

# Anti-FADS1 antibody [EPR6898] - BSA and Azide free ab240024

Recombinant RabMAb

5 Images

### Overview

<b>Product name</b>	Anti-FADS1 antibody [EPR6898] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR6898] to FADS1 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P, WB, Flow Cyt <b>Unsuitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human FADS1 aa 100-200. The exact sequence is proprietary.
<b>General notes</b>	Ab240024 is the carrier-free version of <a href="#">ab126706</a> . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab240024 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

*Maxpar® is a trademark of Fluidigm Canada Inc.*

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

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.

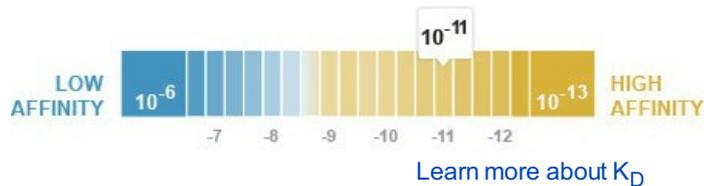
We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

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

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 7.20 x 10 <sup>-11</sup> M



<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR6898
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab240024** 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
ICC/IF		Use at an assay dependent concentration.

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IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
Flow Cyt		Use at an assay dependent concentration. <a href="#">ab199376</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

**Application notes** Is unsuitable for IP.

## Target

**Function** Component of a lipid metabolic pathway that catalyzes biosynthesis of highly unsaturated fatty acids (HUFA) from precursor essential polyunsaturated fatty acids (PUFA) linoleic acid (LA) (18:2n-6) and alpha-linolenic acid (ALA) (18:3n-3). Catalyzes the desaturation of dihomo-gamma-linoleic acid (DHGLA) (20:3n-6) and eicosatetraenoic acid (20:4n-3) to generate arachidonic acid (AA) (20:4n-6) and eicosapentaenoic acid (EPA)(20:5n-3) respectively.

**Tissue specificity** Expressed in many tissues, it is most abundant in the liver, brain, adrenal gland and heart. Found as well in skeletal muscle, lung, placenta, kidney, pancreas and retina.

**Pathway** Lipid metabolism; polyunsaturated fatty acid biosynthesis.

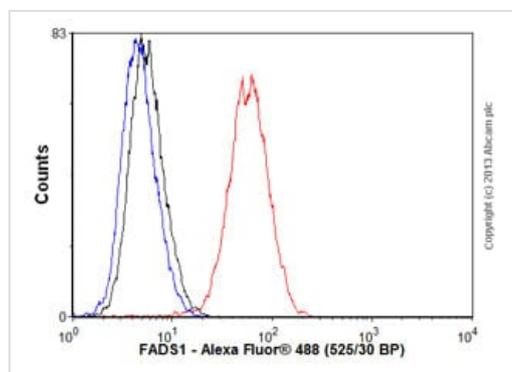
**Sequence similarities** Belongs to the fatty acid desaturase family.  
Contains 1 cytochrome b5 heme-binding domain.

**Developmental stage** Highly expressed in fetal liver and fetal brain.

**Domain** The histidine box domains may contain the active site and/or be involved in metal ion binding.

**Cellular localization** Endoplasmic reticulum membrane.

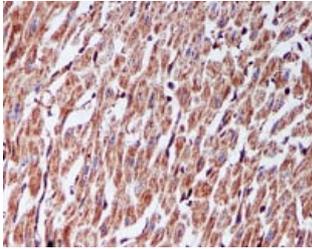
## Images



Flow Cytometry - Anti-FADS1 antibody [EPR6898] - BSA and Azide free (ab240024)

Overlay histogram showing HepG2 cells stained with [ab126706](#) (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody ([ab126706](#), 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) ([ab150077](#)) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in

HepG2 cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126706](#)).

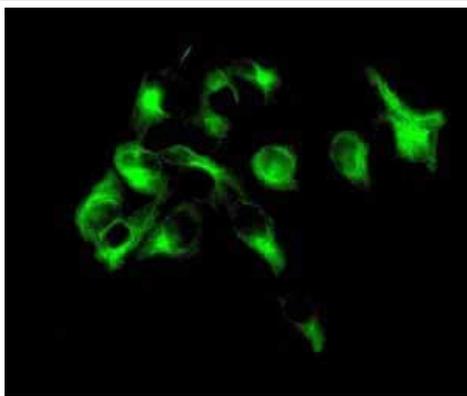


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FADS1 antibody [EPR6898] - BSA and Azide free (ab240024)

[ab126706](#), at 1/100 dilution, staining FADS1 in Paraffin-embedded Human heart tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126706](#)).

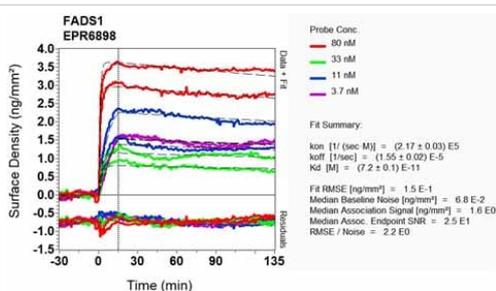
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-FADS1 antibody [EPR6898] - BSA and Azide free (ab240024)

[ab126706](#), at 1/100 dilution, staining FADS1 in A549 cells by Immunofluorescence.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126706](#)).



OI-RD Scanning - Anti-FADS1 antibody [EPR6898] - BSA and Azide free (ab240024)

Equilibrium disassociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126706](#)).

## Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-FADS1 antibody [EPR6898] - BSA and Azide free (ab240024)

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

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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