abcam

Product datasheet

Anti-FADS1 antibody [EPR6898] ab126706

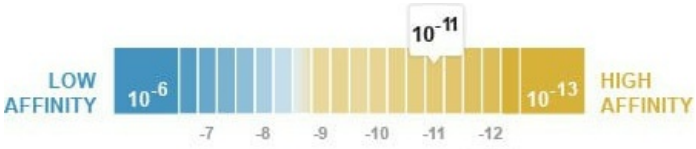
Recombinant RabMAb

17 References 6 Images

Overview

Product name	Anti-FADS1 antibody [EPR6898]
Description	Rabbit monoclonal [EPR6898] to FADS1
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF **Unsuitable for:** IP
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat
Immunogen	Synthetic peptide within Human FADS1 aa 100-200. The exact sequence is proprietary.
Positive control	HepG2, Human fetal lung, fetal liver and fetal brain lysates; Human heart tissue; A549 cells.
General notes	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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K_D = 7.20 x 10^{-11} M  Learn more about K_D
Storage buffer	pH: 7.20

	Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6898
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab126706 in the following tested applications.

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

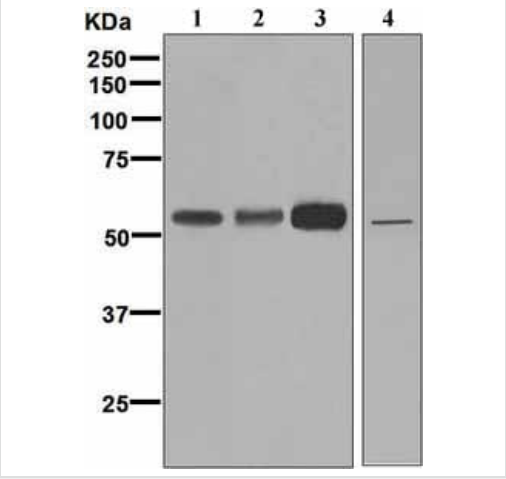
Application	Abreviews	Notes
Flow Cyt (Intra)		1/100 - 1/1000. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

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



Western blot - Anti-FADS1 antibody [EPR6898] (ab126706)

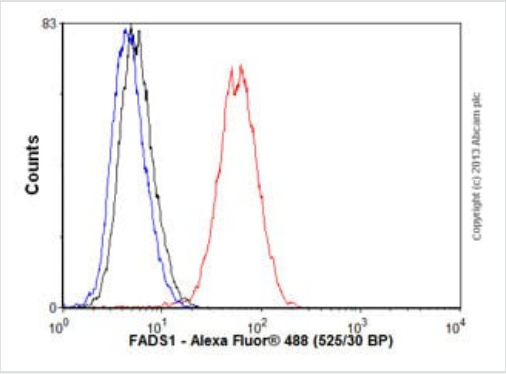
All lanes : Anti-FADS1 antibody [EPR6898] (ab126706) at 1/1000 dilution

Lane 1 : Human fetal lung lysate
Lane 2 : Human fetal liver lysate
Lane 3 : Human fetal brain lysate
Lane 4 : HepG2 lysate

Lysates/proteins at 10 µg per lane.

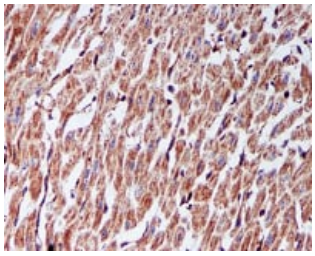
Secondary
All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 52 kDa



Flow Cytometry (Intracellular) - Anti-FADS1 antibody [EPR6898] (ab126706)

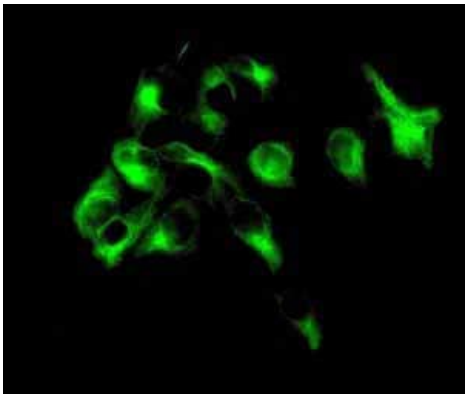
Overlay histogram showing HepG2 cells stained with ab126706 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions 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/1x10^6 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FADS1 antibody [EPR6898] (ab126706)

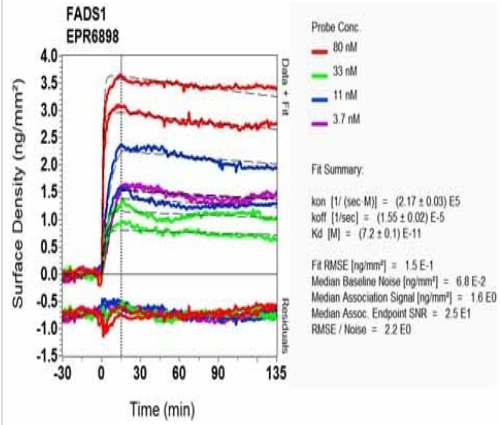
ab126706, at 1/100 dilution, staining FADS1 in Paraffin-embedded Human heart tissue by Immunohistochemistry.

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



ab126706, at 1/100 dilution, staining FADS1 in A549 cells by Immunofluorescence.

Immunocytochemistry/ Immunofluorescence - Anti-FADS1 antibody [EPR6898] (ab126706)

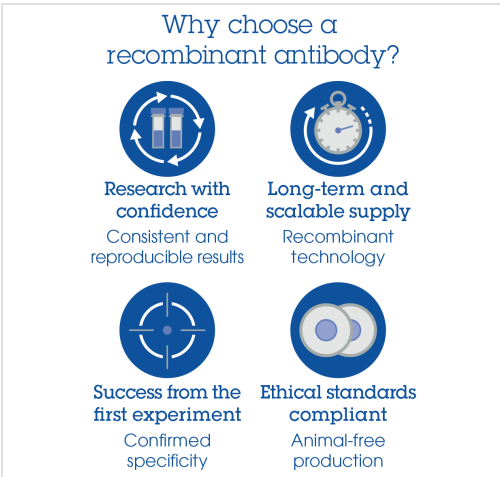


OI-RD Scanning - Anti-FADS1 antibody [EPR6898] (ab126706)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Anti-FADS1 antibody [EPR6898] (ab126706)

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