SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-FADS2 antibody

Catalog Number: SL11516R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	FADS2
Immunogen:	KLH conjugated synthetic peptide derived from human FADS2: 221-300/444
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Mouse, (predicted: Human, Rat, Chicken, Pig, Cow, Horse, Rabbit)
Predicted MW.:	52kDa
Subcellular Location:	cytoplasmic The cell membrane
Background:	Members of the fatty acid desaturase (FADS) family, including FADS1, FADS2 and FADS3, regulate the desaturation of fatty acids by introducing double bonds between defined carbons of fatty acyl chains, thereby playing an essential role in the lipid metabolic pathway. Members of this family share N-terminal cytochrome b5-like domains, C-terminal multiple membrane-spanning desaturase regions and 3 histidine box motifs. FADS2 (fatty acid desaturase 2), also known as D6D, DES6, LLCDL2 or TU13, is a 444 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and contains one cytochrome b5 heme-binding domain. Expressed in adult and fetal heart and in adult liver, brain, lung and retina, FADS2 functions as a component of a lipid metabolic pathway and catalyzes the first step in the pathway, namely the formation of unsaturated fatty acids from polyunsaturated fatty acids. Defects in the gene encoding FADS2 are the cause of cause of fatty acid delta-6-desaturase deficiency, an affliction that is characterized by skin abnormalities, corneal ulceration and growth failure.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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	Multiple isoforms of FADS2 exist due to alternative splicing events. **Function:** FADS2 (Fatty acid desaturase 2) catalyses the biosynthesis of highly unsaturated fatty acids from precursor essential polyunsaturated fatty acids (linoleic and alpha-linoleic acid). FADS family members comprise an N-terminal cytochrome b5-like domain and a C-terminal membrane-spanning desaturase. FADS2 is repressed by dietary highly unsaturated fatty acids. Altered expression of FADS2 may be associated with obesity-associated insulin resistance. Genetic studies have linked FADS2 to IQ and attention-deficit/hyperactivity disorder (ADHD). **Subcellular Location:** Endoplasmic reticulum membrane; Multi-pass membrane protein **Tissue Specificity:** Expressed in a wide array of tissues, highest expression is found in liver followed by brain, lung, heart, and retina. A lower level is found in breast tumor when compared with normal tissues; lowest levels were found in patients with poor prognostic index. **Similarity:** Belongs to the fatty acid desaturase family. Contains 1 cytochrome b5 heme-binding domain. **Database links:** **Entrez Gene:** 9415 Human **Entrez Gene:** 56473 Mouse **Entrez Gene:** 83512 Rat Omim: 606149 Human **SwissProt:** Q4R749 Cynomolgus monkey **SwissProt:** O95864 Human **SwissProt:** Q9Z0R9 Mouse **SwissProt:** Q5REA7 Orangutan **SwissProt:** Q9Z122 Rat **Unigene:** 502745 Human **Unigene:** 38901 Mouse **Unigene:** 162483 Rat

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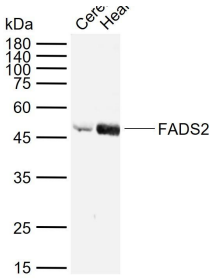
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[VALIDATION IMAGES]



Sample:
Lane 1: Mouse Cerebrum tissue lysates
Lane 2: Mouse Heart tissue lysates
Primary: Anti-FADS2 (SL11516R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 52 kDa
Observed band size: 47 kDa

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