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Rabbit Anti-FADS2 antibody

SL11516R

Product Name:	FADS2
Chinese Name:	脂肪酸脱氢酶2抗体
Alias:	D6D; Delta(6) desaturase; Delta(6) fatty acid desaturase; DES 6; DES6; FADS 2; FADSD 6; FADSD6; Fatty acid desaturase 2; linoleoyl-CoA desaturase (delta-6-desaturase) like 2; LLCDL 2; LLCDL2; SLL0262; TU 13; TU13; FADS2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	52kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FADS2:221-300/444
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. 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.

SWISS:
O95864

Gene ID:
9415

Database links:

Entrez Gene: 9415Human

Entrez Gene: 56473Mouse

Entrez Gene: 83512Rat

Omim: 606149Human

	SwissProt: Q4R749Cynomolgus monkey SwissProt: O95864Human SwissProt: Q9Z0R9Mouse SwissProt: Q5REA7Orangutan SwissProt: Q9Z122Rat Unigene: 502745Human Unigene: 38901Mouse Unigene: 162483Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.