# FADS1 Rabbit mAb[7V24]

Cat NO. :A61659

# Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB	H,M,R	O60427	52kDa	Rabbit	lgG	50ul 100ul,200ul

### **Applications detail:**

# Application Dilution WB 1:1000-2000 The optimal dilutions should be determined by the end user

## Conjugate:

UnConjugate

Form:

Liquid

#### sensitivity:

Endogenous

# **Purification**:

Protein A purification

#### Specificity:

Antibody is produced by immunizing animals with a synthetic peptide of human FADS1.

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

#### Tissue specificity:

Widely expressed, with highest levels in liver, brain, adrenal gland and heart. Highly expressed in fetal liver and brain..

#### Subcellular location:

[Isoform 1]: Endoplasmic reticulum membrane,Multi-pass membrane protein. Mitochondrion.,[Isoform 2]: Endoplasmic reticulum membrane,Multi-pass membrane protein.

#### **Function**:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/ Immunofluorescence F: Flow Cytometry

Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse

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[Isoform 1]: Acts as a front-end fatty acyl-coenzyme A (CoA) desaturase that introduces a cis double bond at carbon 5 located between a preexisting double bond and the carboxyl end of the fatty acyl chain. Involved in biosynthesis of highly unsaturated fatty acids (HUFA) from the essential polyunsaturated fatty acids (PUFA) linoleic acid (LA) (18:2n-6) and alpha-linolenic acid (ALA) (18:3n-3) precursors. Specifically, desaturates dihomo-gamma-linoleoate (DGLA) (20:3n-6) and eicosatetraenoate (ETA) (20:4n-3) to generate arachidonate (AA) (20:4n-6) and eicosapentaenoate (EPA) (20:5n-3), respectively (PubMed:10601301, PubMed:10769175). As a rate limiting enzyme for DGLA (20:3n-6) and AA (20:4n-6)-derived eicosanoid biosynthesis, controls the metabolism of inflammatory lipids like prostaglandin E2, critical for efficient acute inflammatory response and maintenance of epithelium homeostasis. Contributes to membrane phospholipid biosynthesis by providing AA (20:4n-6) as a major acyl chain esterified into phospholipids. In particular, regulates phosphatidylinositol-4,5-bisphosphate levels, modulating inflammatory cytokine production in T-cells (By similarity). Also desaturates (11E)-octadecenoate (trans-vaccenoate)(18:1n-9), a metabolite in the biohydrogenation pathway of LA (18:2n-6) (By similarity)..., [Isoform 2]: Does not exhibit any catalytic activity toward 20:3n-6, but it may enhance FADS2 activity..

# Validation Data:

## FADS1 Rabbit mAb[7V24] Images



Western blot (SDS PAGE) analysis of extracts from Rat liver tissue lysate.Using FADS1 Rabbit mAb IgG [7V24] at dilution of 1:1000 incubated at 4°C over night.

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