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FADS1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58269

Specification

FADS1 Polyclonal Antibody - Product Information

Application	**IHC-P, WB**
Primary Accession	O60427
Reactivity	**Rat, Pig, Dog, Cow**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**51964**

FADS1 Polyclonal Antibody - Additional Information

Gene ID 3992

Other Names
Acyl-CoA (8-3)-desaturase, 1.14.19.44, Delta(5) fatty acid desaturase, D5D, Delta-5 desaturase, Fatty acid desaturase 1, FADS1 {ECO:0000303|PubMed:10860662, ECO:0000312|HGNC:HGNC:3574}

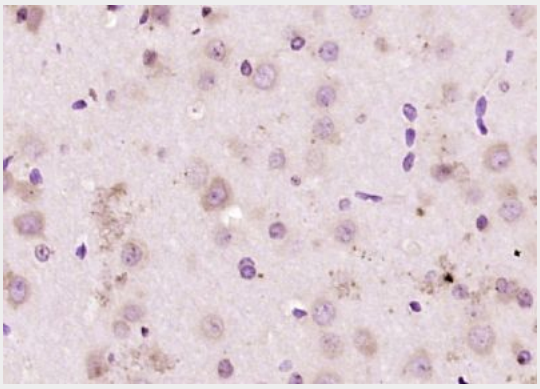
Format
0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. 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 ℃.

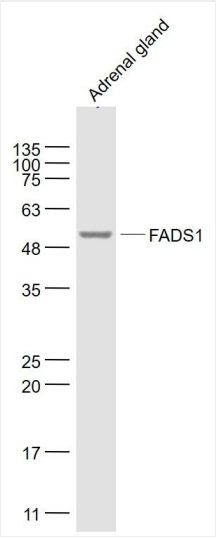
FADS1 Polyclonal Antibody - Protein Information

Name FADS1 {ECO:0000303|PubMed:10860662, ECO:0000312|HGNC:HGNC:3574}

Function
[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.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FADS1) Polyclonal Antibody, Unconjugated (bs-5060R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



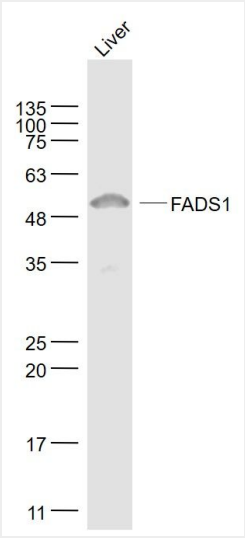
Sample:
Adrenal gland (Mouse) Lysate at 40 ug
Primary: Anti- FADS1 (bs-5060R) at 1/1000 dilution

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).

Cellular Location
[Isoform 1]: Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:A4UVI1}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A4UVI1}. Mitochondrion

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

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 49 kD
Observed band size: 50 kD



Sample:
Liver (Mouse) Lysate at 40 ug
Primary: Anti- FADS1 (bs-5060R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 49 kD
Observed band size: 50 kD

FADS1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture