

FADS1 recombinant antibody

FADS1 Recombinant Monoclonal Antibody

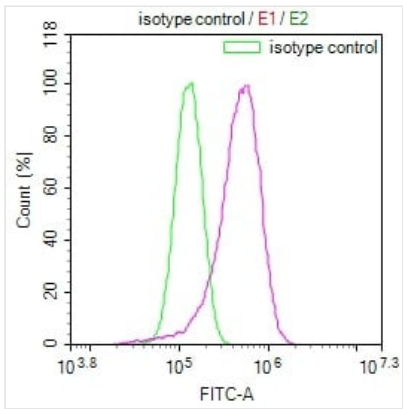
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA278986	HEK293F Cell	Human	Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry, Western Blot, ELISA

PRODUCT SYNONYMS

FADS1; Monoclonal Recombinant Antibody; FADS1 Recombinant Monoclonal Antibody; Fatty acid desaturase 1 (EC 1.14.19.-)(Delta(5) fatty acid desaturase)(D5D)(Delta(5) desaturase)(Delta-5 desaturase); FADSD5; FADS1 recombinant antibody

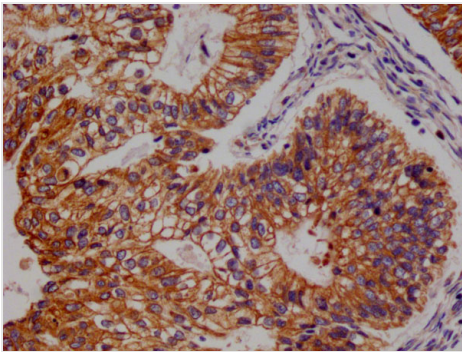
PRODUCT SPECIFICATIONS

Host	HEK293F Cell
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	7A10
Purity/Purification	Affinity purified
Form/Format	Liquid; PBS, 150mM NaCl, 0.02% sodium azide, 50% glycerol, pH 7.4.
Applicable Applications for FADS1 recombinant antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot), ELISA
Immunogen Species	Human
Immunogen	A synthesized peptide derived from Human FADS1
Conjugation	Non-conjugated
Research Area	Cancer; Cardiovascular; Tags & Cell Markers; Metabolism; Signal transduction
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.



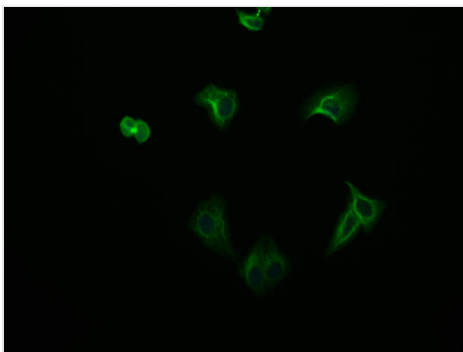
FCM/FACS (Flow Cytometry)

Overlay Peak curve showing HepG2 cells stained with AAA278986 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*106cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1ug/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.



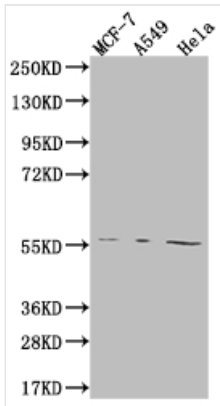
IHC (Immunohistochemistry)

IHC image of AAA278986 diluted at 1:100 and staining in paraffin-embedded human endometrial cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05% DAB.



IF (Immunofluorescence)

Immunofluorescence staining of HepG2 cell with AAA278986 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 565-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



WB (Western Blot)

Western BlotPositive WB detected in: MCF-7 whole cell lysate, A549 whole cell lysate, HeLa whole cell lysateAll lanes: FADS1 antibody at 1:2000SecondaryGoat polyclonal to rabbit IgG at 1/50000Predicted band size: 52, 43 kDaObserved band size: 55 kDa

ADDITIONAL INFORMATION

Related Product Information for FADS1 recombinant antibody

[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). {ECO:0000250|UniProtKB:Q920L1, ECO:0000250|UniProtKB:Q920R3, ECO:0000269|PubMed:10601301, ECO:0000269|PubMed:10769175}.; [Isoform 2]: Does not exhibit any catalytic activity toward 20:3n-6, but it may enhance FADS2 activity. {ECO:0000250|UniProtKB:A4UVI1}.

NCBI AND UNIPROT INFORMATION

NCBI GI #	214831730
NCBI GeneID	3992
NCBI Accession #	NP_037534.3
NCBI GenBank Nucleotide #	NM_013402.4
UniProt Accession #	O60427; Q53GM5; Q8N3A6; Q8NCC7; Q8NCG0; Q96I39; Q96SV3; Q96T10; Q9NRP8; Q9NYX1; A8K0I7; B2RAI0
Molecular Weight	42,474 Da
NCBI Official Full Name	fatty acid desaturase 1
NCBI Official Synonym Full Names	fatty acid desaturase 1
NCBI Official Symbol	FADS1
NCBI Official Synonym Symbols	D5D; TU12; FADS6; FADSD5; LLCDL1
NCBI Protein Information	fatty acid desaturase 1; delta-5 desaturase; delta(5) desaturase; delta-5 fatty acid desaturase; delta(5) fatty acid desaturase; linoleoyl-CoA desaturase (delta-6-desaturase)-like 1
UniProt Protein Name	Fatty acid desaturase 1
UniProt Gene Name	FADS1
UniProt Synonym Gene Names	FADSD5; D5D; Delta(5) desaturase; Delta-5 desaturase
UniProt Entry Name	FADS1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/fads1-recombinant-antibody-clone-7a10-flow-cytometry-immunofluorescence-immunohistochemistry-western-blot-elisa/278986>