

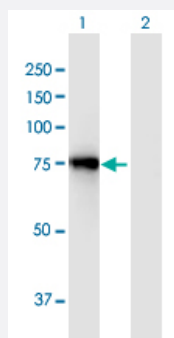
MaxPab®

ACSL3 purified MaxPab mouse polyclonal antibody (B01P)

Catalog # H00002181-B01P

Size 50 ug

Applications



Western Blot (Transfected lysate)

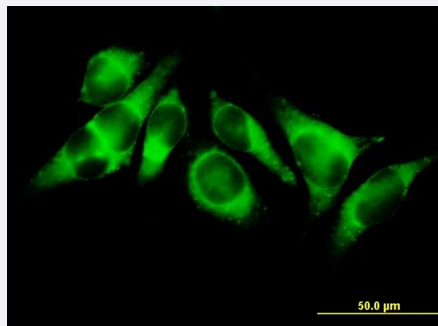
Western Blot analysis of ACSL3 expression in transfected 293T cell line ([H00002181-T01](#)) by ACSL3 MaxPab polyclonal antibody.

Lane 1: ACSL3 transfected lysate(79.2 KDa).

Lane 2: Non-transfected lysate.

Immunofluorescence

Immunofluorescence of purified MaxPab antibody to ACSL3 on HeLa cell. [antibody concentration 10 ug/ml]



Specification

Product Description

Mouse polyclonal antibody raised against a full-length human ACSL3 protein.

Immunogen

ACSL3 (NP_004448.2, 1 a.a. ~ 720 a.a) full-length human protein.

Sequence

MNNHVSSKPSTMKLKHTINPILLYFIHFLISLYTILTYIPFYFFSESRQEKSNNRIKAKPVNSKPDSAYRS
VNSLDGLASVLYPGCDTLDKVFTYAKNKFKNKRLLGTTREVLNEEDEVQPNGKIFKKVILGQYNWL
SYEDVVFVRAFNFNGNLQMLGQKPKTNIAIFCETRAEWMIAAQACFMYNFQLVTLTYATLGGPAMHA
LNETEVTNIITSKELLQTKLKDIVSLVPRLRHIITVDGKPPTWSEFPKGIVHTMAAVEALGAKASMEN
QPHSKPLPSDIAVIMYTSGSTGLPKGVMISHSNIAGITGMAERIPELGEEDVYIGYLPALHVLLELSAE
LVCLSHGCRIGYSSPQTLADQSSKIKKGSKGDTSMMLKPTLMAAVPEIMDRYKNVMNKVSEMSSF
QRNLFILAYNYKMEQISKGRNTPLCDSFVFRKVRSLGNGNIRLLCGGAPLSATTQRFMNICFCCPV
GQGYGLTESAGAGTISEVWDYNTGRV/GAPLVCCEIKLKNWEEGGYFNTDKPHPRGEILIGGQSVT
MGYYKNEAKTKADFFEDENGQRWLCTGDIGEFEPDGCLKIIDRKKDLVKLQAGEYVSLGKVEAAL
KNLPLVDNICAYANSYHSYVIGFVVPNQKELTELARKKGLKGTWEELCNSCEMENEVLKVLSEAAI
SASLEKFEIPVKIRLSPEPWTPETGLVTDFAFKLKRKELKTHYQADIERMYGRK

Host

Mouse

Reactivity

Human

Quality Control Testing

Antibody reactive against mammalian transfected lysate.

Storage Buffer

In 1x PBS, pH 7.4

Storage Instruction

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

Western Blot analysis of ACSL3 expression in transfected 293T cell line ([H00002181-T01](#)) by ACSL3 MaxPab polyclonal antibody.

Lane 1: ACSL3 transfected lysate(79.2 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Immunofluorescence

Immunofluorescence of purified MaxPab antibody to ACSL3 on HeLa cell. [antibody concentration 10 ug/ml]

Gene Info — ACSL3

Entrez GeneID

[2181](#)

GeneBank Accession#

[NM_004457.3](#)

Protein Accession#

[NP_004448.2](#)

Gene Name

ACSL3

Gene Alias	ACS3, FACL3, PRO2194
Gene Description	acyl-CoA synthetase long-chain family member 3
Omim ID	602371
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is an isozyme of the long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long-chain fatty acids into fatty acyl-CoA esters, and thereby play a key role in lipid biosynthesis and fatty acid degradation. This isozyme is highly expressed in brain, and preferentially utilizes myristate, arachidonate, and eicosapentaenoate as substrates. The amino acid sequence of this isozyme is 92% identical to that of rat homolog. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq]
Other Designations	OTTHUMP00000164212 fatty-acid-Coenzyme A ligase, long-chain 3 lignoceroyl-CoA synthase

Publication Reference

- [TNF- \$\alpha\$ induces acyl-CoA synthetase 3 to promote lipid droplet formation in human endothelial cells.](#)

Jung HS, Shimizu-Albergine M, Shen X, Kramer F, Shao D, Vivekanandan-Giri A, Pennathur S, Tian R, Kanter JE, Bornfeldt KE. Journal of Lipid Research 2020 Jan; 61(1):33.

Application: IF, Human, Human coronary artery endothelial cells

- [Seipin Facilitates Triglyceride Flow to Lipid Droplet and Counteracts Droplet Ripening via Endoplasmic Reticulum Contact.](#)

Salo VT, Li S, Vihinen H, Hölttä-Vuori M, Szkalisity A, Horvath P, Belevich I, Peränen J, Thiele C, Somerharju P, Zhao H, Santinho A, Thiam AR, Jokitalo E, Ikonen E.

Developmental Cell 2019 Aug; 50(4):478.

Application: IF, Human, A-431 cells

- [Syntaxin 17 promotes lipid droplet formation by regulating the distribution of acyl-CoA synthetase 3.](#)

Hana Kimura, Kohei Arasaki, Yuki Ohsaki, Toyoshi Fujimoto, Takayuki Ohtomo, Junji Yamada, Mitsuo Tagaya. Journal of Lipid Research 2018 May; 59(5):805.

Application: WB, IF, IHC, Human, mouse, HeLA cells, hepatocytes,

- [Acyl-CoA synthetase 3 promotes lipid droplet biogenesis in ER microdomains.](#)

Kassan A, Herms A, Fernandez-Vidal A, Bosch M, Schieber NL, Reddy BJ, Fajardo A, Gelabert-Baldrich M, Tebar F, Enrich C, Gross SP, Parton RG, Pol A.

The Journal of Cell Biology 2013 Dec; 203(6):985.

Application: WB, Human, Monkey, COS-1, HepG2 cells

- [Activation of LXR increases acyl-CoA synthetase activity through direct regulation of ACSL3 in human placental trophoblast cells.](#)

Weedon-Fekjaer MS, Dalen KT, Solaas K, Staff AC, Duttaroy AK, Nebb HI.

Journal of Lipid Research 2010 Jul; 51(7):1886.

Application: WB-Tr, Human, BeWo cells

Pathway

- [Adipocytokine signaling pathway](#)
- [Fatty acid metabolism](#)
- [Metabolic pathways](#)
- [PPAR signaling pathway](#)