Product Name: AASS Rabbit Polyclonal Antibody
Catalog #: APRab06382
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	102kDa

Antigen Information

Gene Name	AASS
Alternative Names	AASS; Alpha-aminoadipic semialdehyde synthase; mitochondrial; LKR/SDH
Gene ID	10157.0
SwissProt ID	Q9UDR5
Immunogen	The antiserum was produced against synthesized peptide derived from human AASS. AA range:251-300

Background

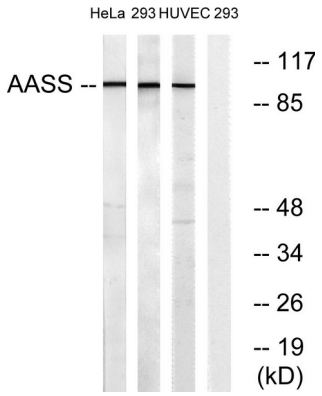
This gene encodes a bifunctional enzyme that catalyzes the first two steps in the mammalian lysine degradation pathway. The

N-terminal and the C-terminal portions of this enzyme contain lysine-ketoglutarate reductase and saccharopine dehydrogenase activity, respectively, resulting in the conversion of lysine to alpha-aminoadipic semialdehyde. Mutations in this gene are associated with familial hyperlysinemia. [provided by RefSeq, Jul 2008],catalytic activity:N(6)-(L-1,3-dicarboxypropyl)-L-lysine + NAD(+) + H(2)O = L-glutamate + 2-aminoadipate 6-semialdehyde + NADH.,catalytic activity:N(6)-(L-1,3-dicarboxypropyl)-L-lysine + NADP(+) + H(2)O = L-lysine + 2-oxoglutarate + NADPH.,disease:Defects in AASS are the cause of hyperlysinemia [MIM:238700]. Hyperlysinemia is an autosomal recessive condition characterized by hyperlysinemia lysinuria and variable saccharopinuria.,function:Bifunctional enzyme that catalyzes the first two steps in lysine degradation. The N-terminal and the C-terminal contain lysine-ketoglutarate reductase and saccharopine dehydrogenase activity, respectively.,induction:Induced by starvation.,pathway:Amino-acid degradation; L-lysine degradation via saccharopine pathway; glutaryl-CoA from L-lysine: step 1/6.,pathway:Amino-acid degradation; L-lysine degradation via saccharopine pathway; glutaryl-CoA from L-lysine: step 2/6.,similarity:In the C-terminal section; belongs to the saccharopine dehydrogenase family.,similarity:In the N-terminal section; belongs to the AlaDH/PNT family.,subunit:Homodimer.,tissue specificity:Expressed in all 16 tissues examined with highest expression in the liver.,

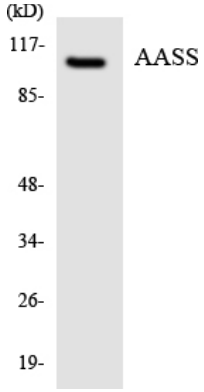
Research Area

Lysine biosynthesis;Lysine degradation;

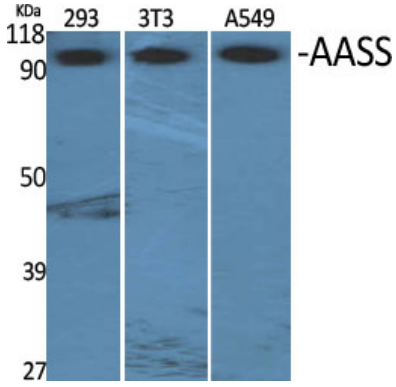
Image Data



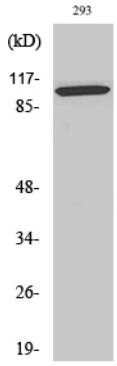
Western blot analysis of lysates from 293, HUVEC, and HeLa cells, using AASS Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from COLO205 cells using AASS antibody.



Western Blot analysis of various cells using AASS Polyclonal Antibody



Western Blot analysis of HeLa cells using AASS Polyclonal Antibody