10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ASL Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP10658c

Specification

ASL Antibody (Center) Blocking Peptide - Product Information

Primary Accession	P04424
Other Accession	NP_001020114.1, NP_000039.2

ASL Antibody (Center) Blocking Peptide - Additional Information

Gene ID 435

Other Names
Argininosuccinate lyase, ASAL, Arginosuccinase, ASL

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ASL Antibody (Center) Blocking Peptide - Protein Information

Name ASL

Function
Catalyzes the reversible cleavage of L-argininosuccinate to fumarate and L-arginine, an intermediate step reaction in the urea cycle mostly providing for hepatic nitrogen detoxification into excretable urea as well as de novo L-arginine synthesis in nonhepatic tissues (PubMed:11747433, PubMed:11747432, PubMed:9045711, PubMed:22081021, PubMed:2263616). Essential regulator of intracellular and extracellular L-arginine pools. As part of citrulline-nitric oxide cycle, forms tissue-specific multiprotein complexes with argininosuccinate synthase ASS1, transport protein SLC7A1 and nitric oxide synthase NOS1, NOS2 or NOS3, allowing for cell-autonomous L-arginine synthesis while channeling extracellular L-arginine to nitric oxide synthesis pathway (PubMed:22081021).

ASL Antibody (Center) Blocking Peptide - Protocols

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

- Blocking Peptides

ASL Antibody (Center) Blocking Peptide - Images

ASL Antibody (Center) Blocking Peptide - Background

ASL encodes a member of the lyase 1 family. Theencoded protein forms a cytosolic homotetramer and primarilycatalyzes the reversible hydrolytic cleavage of argininosuccinateinto arginine and fumarate, an essential step in the liver indetoxifying ammonia via the urea cycle. Mutations in this generesult in the autosomal recessive disorder argininosuccinicaciduria, or argininosuccinic acid lyase deficiency. Anontranscribed pseudogene is also located on the long arm ofchromosome 22. Alternatively spliced transcript variants encodingdifferent isoforms have been described.

ASL Antibody (Center) Blocking Peptide - References

Hozyasz, K.K., et al. Arch. Oral Biol. (2010) In press :Trevisson, E., et al. J. Biol. Chem. 284(42):28926-28934(2009)Trevisson, E., et al. Hum. Mutat. 28(7):694-702(2007)Tanaka, T., et al. Tohoku J. Exp. Med. 198(2):119-124(2002)Kleijer, W.J., et al. J. Inherit. Metab. Dis. 25(5):399-410(2002)