

ASTL (m): 293T Lysate: sc-126457

BACKGROUND

ASTL (astacin-like metalloendopeptidase), also known as ovastacin, is a 435 amino acid protein that belongs to the astacin family of metalloproteases. The human ASTL, which shares a 78% sequence identity with mouse ASTL, contains an N-terminal signal peptide, a prodomain, a zinc-dependent metalloprotease domain and a C-terminal extension that is likely to be heavily O-glycosylated. Highly expressed in unfertilized oocytes, ASTL expression drops to undetectable levels upon fertilization. ASTL has also been shown to be under hormonal regulation, as superovulation caused a dramatic increase in the expression of ASTL. The catalytic activity of ASTL is inhibited by EDTA and the wide spectrum metalloproteinase inhibitor batimastat (BB-94). The gene encoding ASTL maps to chromosome 2q11.1. Two isoforms of ASTL2 exist as a result of alternative splicing events.

REFERENCES

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3. Quesada, V., et al. 2004. Identification and characterization of human and mouse ovastacin: a novel metalloproteinase similar to hatching enzymes from arthropods, birds, amphibians, and fish. *J. Biol. Chem.* 279: 26627-26634.
4. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608860. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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6. Sterchi, E.E. 2008. Special issue: metzincin metalloproteinases. *Mol. Aspects Med.* 29: 255-257.
7. Sterchi, E.E., et al. 2008. Meprins, membrane-bound and secreted astacin metalloproteinases. *Mol. Aspects Med.* 29: 309-328.
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CHROMOSOMAL LOCATION

Genetic locus: Astl (mouse) mapping to 2 F1.

PRODUCT

ASTL (m): 293T Lysate represents a lysate of mouse ASTL transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

ASTL (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ASTL antibodies. Recommended use: 10-20 µl per lane.

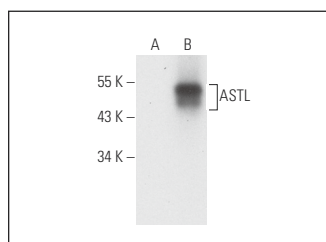
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ASTL (D-8): sc-514054 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ASTL expression in ASTL transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

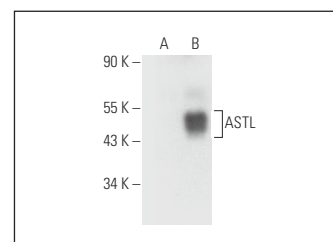
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



ASTL (D-8): sc-514054. Western blot analysis of ASTL expression in non-transfected: sc-117752 (A) and mouse ASTL transfected: sc-126457 (B) 293T whole cell lysates.



ASTL (F-10): sc-514391. Western blot analysis of ASTL expression in non-transfected: sc-117752 (A) and mouse ASTL transfected: sc-126457 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.