

DATASHEET

Atlastin-1 Rabbit Polyclonal Antibody

CAT. NO. APA12714

KEY FEATURES

Target	Atlastin-1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Atlastin-1 (ATL1) is a membrane-anchored GTPase that mediates the GTP-dependent fusion of endoplasmic reticulum (ER) membranes, maintaining the continuous ER network. It facilitates the formation of three-way junctions where ER tubules intersect. Two atlastin-1 on neighboring ER tubules bind GTP and form loose homodimers through the GB1/RHD3-type G domains and 3HB regions. Upon GTP hydrolysis, the 3HB regions tighten, pulling the membranes together to drive their fusion. After fusion, the homodimer disassembles upon release of inorganic phosphate (Pi).

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to Atlastin-1
Specificity	Recognizes endogenous levels of Atlastin-1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human Atlastin-1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 63 kD; Observed: 64 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	GBP3; SPG3A; Atlastin-1; Brain-specific GTP-binding protein; GTP-binding protein 3; GBP-3; hGBP3; Guanine nucleotide-binding protein 3; Spastic paraplegia 3 protein A
Gene Symbol	ATL1
Entrez Gene	51062(Human); 73991(Mouse); 362750(Rat)
SwissProt	Q8WXF7(Human); Q8BH66(Mouse); Q6PST4(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

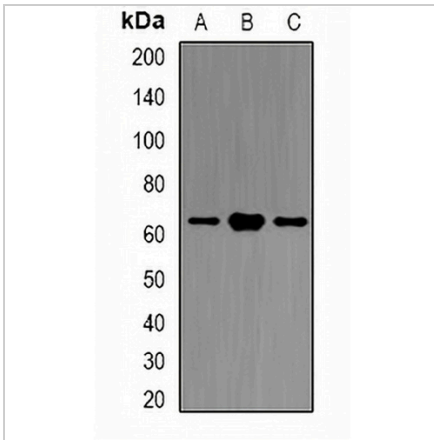
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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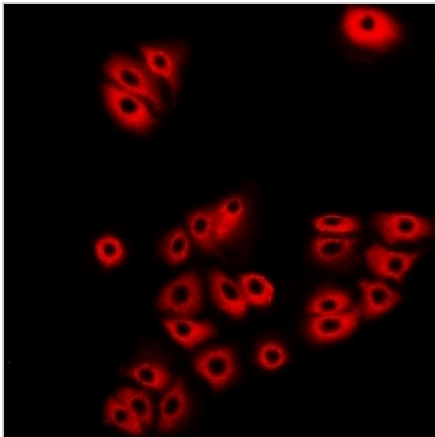
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Western blot analysis of Atlastin-1 expression in LOVO (A), HEK293T (B), mouse brain (C) whole cell lysates. (Predicted band size: 63 kD; Observed band size: 64 kD)



Immunofluorescent analysis of Atlastin-1 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.