

DATASHEET

SPG7 Rabbit Polyclonal Antibody

CAT. NO. APA13876

KEY FEATURES

Target	SPG7	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC	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

Catalytic component of the m-AAA protease, a protease that plays a key role in proteostasis of inner mitochondrial membrane proteins, and which is essential for axonal and neuron development . SPG7 possesses both ATPase and protease activities: the ATPase activity is required to unfold substrates, threading them into the internal proteolytic cavity for hydrolysis into small peptide fragments . The m-AAA protease exerts a dual role in the mitochondrial inner membrane: it mediates the processing of specific regulatory proteins and ensures protein quality control by degrading misfolded polypeptides . Mediates protein maturation of the mitochondrial ribosomal subunit MRPL32/bL32m by catalyzing the cleavage of the presequence of MRPL32/bL32m prior to assembly into the mitochondrial ribosome .

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
IHC	1:50 - 1:200

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

PRODUCT OVERVIEW

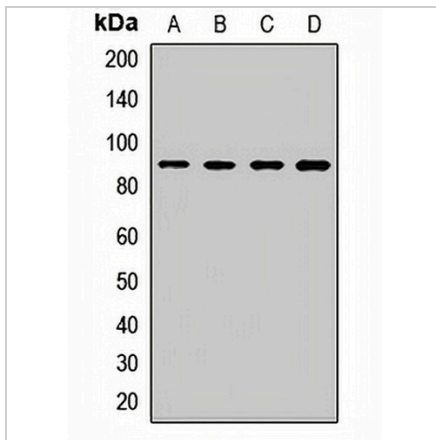
Description	Rabbit polyclonal antibody to SPG7
Specificity	Recognizes endogenous levels of SPG7 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human SPG7
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 53; Observed: 88 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	CAR; CMAR; PGN; Paraplegin; Spastic paraplegia 7 protein
Gene Symbol	SPG7
Entrez Gene	6687(Human); 234847(Mouse); 353231(Rat)
SwissProt	Q9UQ90(Human); Q3ULF4(Mouse); Q7TT47(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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DATA

Western blot analysis of SPG7 expression in MCF7 (A), K562 (B), mouse brain (C), mouse liver (D) whole cell lysates. (Predicted band size: 53; 88 kD; Observed band size: 88 kD)

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.