

# ATP13A5 (N-14): sc-102342

## BACKGROUND

ATP13A5 (ATPase type 13A5) is a 1,218 amino acid multi-pass membrane protein that belongs to the P-type sunfamily of cation transport ATPases. Existing as two alternatively spliced isoforms, ATP13A5 catalyzes the decomposition of ATP to ADP and phosphate, a reaction that may drive intracellular transport processes. The gene encoding ATP13A5 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

## REFERENCES

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- Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.
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## CHROMOSOMAL LOCATION

Genetic locus: ATP13A5 (human) mapping to 3q29; Atp13a5 (mouse) mapping to 16 B2.

## SOURCE

ATP13A5 (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ATP13A5 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102342 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ATP13A5 (N-14) is recommended for detection of ATP13A5 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ATP13A5 siRNA (h): sc-78465, ATP13A5 siRNA (m): sc-141342, ATP13A5 shRNA Plasmid (h): sc-78465-SH, ATP13A5 shRNA Plasmid (m): sc-141342-SH, ATP13A5 shRNA (h) Lentiviral Particles: sc-78465-V and ATP13A5 shRNA (m) Lentiviral Particles: sc-141342-V.

Molecular Weight of ATP13A5: 137 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.