

# ZFYVE27 (H-21): sc-102174

## BACKGROUND

Zinc finger FYVE domain-containing protein 27 (ZFYVE27), also known as SPG33, is a 411 amino acid member of the FYVE-finger family of proteins. The FYVE domain is a cysteine-rich domain of about 70 amino acids that plays a role in the endosomal localization of the FYVE-finger proteins, and a majority of these proteins serve as regulators of endocytic membrane trafficking. ZFYVE27, a multi-pass membrane protein, is an endosomal protein that binds to Spastin, a protein that is primarily involved in microtubule dynamics and severing, vesicular trafficking and endosomal trafficking. Mutations in the gene encoding ZFTVE27 affect neuronal intracellular trafficking in the corticospinal tract and are thought to lead to hereditary spastic paraplegia (HSP), a neurodegenerative disorder, characterized by progressive paralysis of the legs, which is caused by impaired axonal transport. Five isoforms of ZFYVE27 exist as a result of alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ZFYVE27 (human) mapping to 10q24.2; Zfyve27 (mouse) mapping to 19 C3.

## 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.

## SOURCE

ZFYVE27 (H-21) is a purified rabbit polyclonal antibody raised against ZFYVE27 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

ZFYVE27 (H-21) is recommended for detection of ZFYVE27 of mouse, rat, human and dog origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZFYVE27 siRNA (h): sc-90825, ZFYVE27 siRNA (m): sc-155606, ZFYVE27 shRNA Plasmid (h): sc-90825-SH, ZFYVE27 shRNA Plasmid (m): sc-155606-SH, ZFYVE27 shRNA (h) Lentiviral Particles: sc-90825-V and ZFYVE27 shRNA (m) Lentiviral Particles: sc-155606-V.

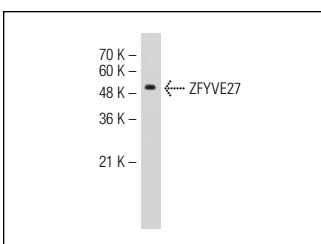
Molecular Weight of ZFYVE27: 46 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



ZFYVE27 (H-21): sc-102174. Western blot analysis of ZFYVE27 expression in Jurkat whole cell lysate.

## PROTOCOLS

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