

Maspardin (H-15): sc-393340

BACKGROUND

Maspardin, also known as MAST, ACP33, GL010, BM-019 or SPG21 (spastic paraplegia 21 (autosomal recessive, Mast syndrome)), is a 308 amino acid cytoplasmic protein that is widely expressed. Belonging to the AB hydrolase superfamily, Maspardin colocalizes with CD4 on endosomal/*trans*-Golgi network. It is thought that Maspardin may act as a negative regulatory factor in CD4-dependent T-cell activation. Defects in the gene encoding Maspardin are the result of hereditary spastic paraplegia autosomal recessive type 21 (also designated Mast syndrome), an autosomal recessive neurodegenerative disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. The gene encoding Maspardin is encoded by human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome.

REFERENCES

1. Cross, H.E. and McKusick, V.A. 1967. The mast syndrome. A recessively inherited form of presenile dementia with motor disturbances. *Arch. Neurol.* 16: 1-13.
2. Iwabuchi, K., et al. 1994. Three patients of complicated form of autosomal recessive hereditary spastic paraplegia associated with hypoplasia of the corpus callosum. *No To Shinkei* 46: 941-947.
3. Tanaka, M., et al. 1995. A case of complicated form of hereditary spastic paraplegia associated with hypoplasia of the corpus callosum and cataracta. *Rinsho Shinkeigaku* 35: 798-802.

CHROMOSOMAL LOCATION

Genetic locus: SPG21 (human) mapping to 15q22.31; Spg21 (mouse) mapping to 9 C.

SOURCE

Maspardin (H-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 192-235 within an internal region of Maspardin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Maspardin (H-5) is available conjugated to agarose (sc-393340 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393340 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393340 PE), fluorescein (sc-393340 FITC), Alexa Fluor® 488 (sc-393340 AF488), Alexa Fluor® 546 (sc-393340 AF546), Alexa Fluor® 594 (sc-393340 AF594) or Alexa Fluor® 647 (sc-393340 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393340 AF680) or Alexa Fluor® 790 (sc-393340 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393340 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

Maspardin (H-15) is recommended for detection of Maspardin of mouse, rat and human 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)], 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 Maspardin siRNA (h): sc-75751, Maspardin siRNA (m): sc-75752, Maspardin shRNA Plasmid (h): sc-75751-SH, Maspardin shRNA Plasmid (m): sc-75752-SH, Maspardin shRNA (h) Lentiviral Particles: sc-75751-V and Maspardin shRNA (m) Lentiviral Particles: sc-75752-V.

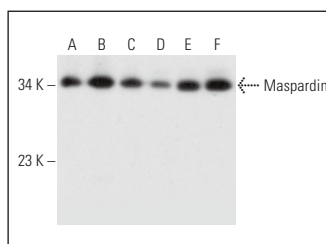
Molecular Weight of Maspardin: 33 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, SK-MEL-24 whole cell lysate: sc-364259 or A549 cell lysate: sc-2413.

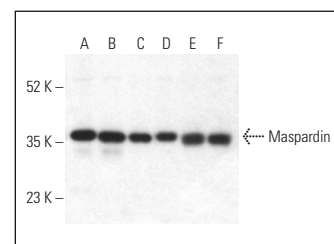
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Maspardin (H-5): sc-393340. Western blot analysis of Maspardin expression in HL-60 (A), U-937 (B), THP-1 (C), A549 (D), SK-MEL-24 (E) and PANC-1 (F) whole cell lysates.



Maspardin (H-5): sc-393340. Western blot analysis of Maspardin expression in HL-60 (A), U-937 (B), THP-1 (C), HeLa (D), J774.A1 (E) and RAW 264.7 (F) whole cell lysates. Detection reagent used: m-IgG₁ BP-HRP: sc-525408.

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.