SANTA CRUZ BIOTECHNOLOGY, INC.

MA2 (M-15): sc-68102

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Paraneoplastic neurological disorders (PNDs) are rare syndromes that are caused by, or associated with, an underlying neoplasm. The most common neoplasm among young male patients is testicular cancer, but the leading cause among other patients is lung cancer. Most PNDs are caused by an immune response against onconeural antigens, causing progressive neurological damage. The paraneoplastic antigen MA family contains three known members: MA1, MA2 and MA3. MA1, also designated neuron- and testis-specific protein 1, is a nucleolar protein in normal cells but localizes to the cytoplasm of tumor cells. MA2, also designated onconeuronal antigen MA2, is a nucleolar protein expressed in brain and testis. MA3 is highly expressed in brain and testis and is expressed at low levels in heart, trachea and kidney.

REFERENCES

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2. Sahashi, K., Sakai, K., Mano, K. and Hirose, G. 2003. Anti-MA2 antibody related paraneoplastic limbic/brain stem encephalitis associated with breast cancer expressing MA1, MA2 and MA3 mRNAs. J. Neurol. Neurosurg. Psychiatr. 74: 1332-1335.
3. Dalmau, J., Graus, F., Villarejo, A., Posner, J.B., Blumenthal, D., Thiessen, B., Saiz, A., Meneses, P. and Rosenfeld, M.R. 2004. Clinical analysis of anti-MA2-associated encephalitis. Brain 127: 1831-1844.
4. Overeem, S., Dalmau, J., Bataller, L., Nishino, S., Mignot, E., Verschuuren, J. and Lammers, G.J. 2004. Hypocretin-1 CSF levels in anti-MA2 associated encephalitis. Neurology 62: 138-140.
5. Waragai, M., Chiba, A., Uchibori, A., Fukushima, T., Anno, M. and Tanaka, K. 2005. Anti-MA2 associated paraneoplastic neurological syndrome presenting as encephalitis and progressive muscular atrophy. J. Neurol. Neurosurg. Psychiatr. 77: 111-113.

CHROMOSOMAL LOCATION

Genetic locus: Pnma2 (mouse) mapping to 14 D1.

SOURCE

MA2 (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MA2 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68102 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MA2 (M-15) is recommended for detection of MA2 of mouse and rat 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 MA2 siRNA (m): sc-62574.

Molecular Weight of MA2: 40 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.