PYST2 (C-9): sc-377381

**BACKGROUND**

Mitogen-activated protein (MAP) kinases are a large class of proteins involved in signal transduction pathways that are activated by a range of stimuli and mediate a number of physiological and pathological changes in the cell. Dual specificity phosphatases (DSPs) are a subclass of the protein tyrosine phosphatase (PTP) gene superfamily, which are selective for dephosphorylating critical phosphothreonine and phosphotyrosine residues within MAP kinases. DSP gene expression is induced by a host of growth factors and/or cellular stresses, thereby negatively regulating the MAP kinase superfamily members including MAPK/ERK, SAPK/JNK and p38. PYST2 inactivates MAPK/ERK, thereby regulating the MAP kinase signaling pathway. PYST2 is overexpressed in patients with acute myelogenous leukemia (AML).

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DUSP7 (human) mapping to 3p21.2; Dusp7 (mouse) mapping to 9 F1.

**SOURCE**

PYST2 (C-9) is a mouse monoclonal antibody raised against amino acids 57-104 mapping within an internal region of PYST2 of human origin.

**PRODUCT**

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

**APPLICATIONS**

PYST2 (C-9) is recommended for detection of PYST2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PYST2 (C-9) is also recommended for detection of PYST2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PYST2 siRNA (h): sc-61427, PYST2 siRNA (m): sc-61428, PYST2 shRNA Plasmid (h): sc-61427-Sh, PYST2 shRNA Plasmid (m): sc-61428-Sh, PYST2 shRNA (h) Lentiviral Particles: sc-61427-V and PYST2 shRNA (m) Lentiviral Particles: sc-61428-V.

Molecular Weight of PYST2: 41 kDa.

Positive Controls: PYST2 (m): 293T Lysate: sc-122861.

**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 Lumino 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-516214 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

PYST2 (C-9): sc-377381. Western blot analysis of PYST2 expression in non-transfected: sc-117752 (A) and mouse PYST2 transfected: sc-122861 (B) 293T whole cell lysates.

PYST2 (C-9): sc-377381. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of keratinocytes, Langerhans cells and melanocytes.

**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.

**SANTA CRUZ BIOTECHNOLOGY, INC.**

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