SANTA CRUZ BIOTECHNOLOGY, INC.

FLJ23356 (S-23): sc-100433

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Serine/threonine protein kinases possess a catalytic subunit which transfers the γ phosphate from nucleotide triphosphates to one or more amino acid residue in a protein substrate side chain, resulting in a conformational change that affects protein function. Serine/threonine kinases play a role in various cellular processes, including division, proliferation, differentiation and apoptosis. The catalytic subunits of serine/threonine kinases are highly conserved between species. FLJ23356, also known as sugen kinase 196, SGK196 or protein kinase-like protein SgK196, is a 350 amino acid protein that belongs to the serine/threonine protein kinase family. FLJ23356 is thought to have a kinase domain that is catalytically inactive. It has been suggested that FLJ23356 may have a glycine-to-serine substitution motif at subdomain VII of its catalytic domain.

REFERENCES

1. Hanks, S.K., et al. 1988. The protein kinase family: conserved features and deduced phylogeny of the catalytic domains. Science 241: 42-52.
2. Hanks, S.K. and Quinn, A.M. 1991. Protein kinase catalytic domain sequence database: identification of conserved features of primary structure and classification of family members. Methods Enzymol. 200: 38-62.
3. Hanks, S.K. and Hunter, T. 1995. Protein kinases 6. The eukaryotic protein kinase superfamily: kinase (catalytic) domain structure and classification. FASEB J. 9: 576-596.

CHROMOSOMAL LOCATION

Genetic locus: POMK (human) mapping to 8p11.21.

SOURCE

FLJ23356 (S-23) is a mouse monoclonal antibody raised against recombinant FLJ23356 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FLJ23356 (S-23) is recommended for detection of FLJ23356 of 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 FLJ23356 siRNA (h): sc-77530, FLJ23356 shRNA Plasmid (h): sc-77530-SH and FLJ23356 shRNA (h) Lentiviral Particles: sc-77530-V.

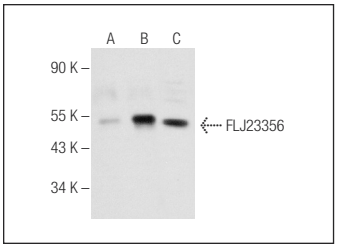
Molecular Weight of FLJ23356: 40 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, FLJ23356 (h): 293T Lysate: sc-372757 or MDA-MB-231 cell lysate: sc-2232.

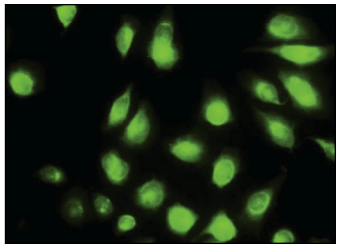
RECOMMENDED SUPPORT REAGENTS

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



FLJ23356 (S-23): sc-100433. Western blot analysis of FLJ23356 expression in non-transfected 293T: sc-117752 (**A**), human FLJ23356 transfected 293T: sc-372757 (**B**) and MDA-MB-231 (**C**) whole cell lysates.



FLJ23356 (S-23): sc-100433. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. von Renesse, A., et al. 2014. POMK mutation in a family with congenital muscular dystrophy with merosin deficiency, hypomyelination, mild hearing deficit and intellectual disability. J. Med. Genet. 51: 275-282.
2. Kuhn, P.H., et al. 2015. Secretome analysis identifies novel signal peptide peptidase-like 3 (Sppl3) substrates and reveals a role of Sppl3 in multiple Golgi glycosylation pathways. Mol. Cell. Proteomics 14: 1584-1598.
3. Hobohm, L., et al. 2022. N-terminome analyses underscore the prevalence of SPPL3-mediated intramembrane proteolysis among Golgi-resident enzymes and its role in Golgi enzyme secretion. Cell. Mol. Life Sci. 79: 185.
4. Truberg, J., et al. 2022. Endogenous tagging reveals a mid-Golgi localization of the glycosyltransferase-cleaving intramembrane protease SPPL3. Biochim. Biophys. Acta Mol. Cell Res. 1869: 119345.

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 for detailed protocols and support products.