SANTA CRUZ BIOTECHNOLOGY, INC.

Dyrk2 (949C2E): sc-517662

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Dyrk (for dual specificity tyrosine phosphorylation regulated kinase) is the homolog of the *Drosophila* mnb (minibrain) gene, which is required for neurogenesis. Dyrk is a dual-specificity tyrosine kinase and serine/threonine kinase, which is itself regulated by tyrosine phosphorylation. Several mammalian Dyrk related proteins have been identified and are thought to compose a family of dual specificity protein kinases. Dyrk family members, including Dyrk1A (originally Dyrk), Dyrk1B, Dryk1C, Dyrk2, Dyrk3, Dyrk4A and Dyrk4B, are thought to be involved in diverse cellular functions. Dyrk1A is a candidate gene that may be involved in Down syndrome, and it has been found to be somewhat overexpressed in Down syndrome. Two isoforms of human fetal brain Dyrk2 exist: a deduced 528 amino acid protein and a protein containing 73 additional amino acids at the amino terminus. Dyrk3 is strongly expressed in testis, only after the onset of spermatogenesis, and very weakly expressed in spleen and adrenal gland. The genes which encode Dyrk2 and Dyrk3 map to human chromosomes 12q15 and 1q32.1, respectively.

REFERENCES

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4. Becker, W., Weber, Y., Wetzel, K., Eirmbter, K., Tejedor, F.J. and Joost, H.G. 1998. Sequence characteristics, subcellular localization, and substrate specificity of DYRK-related kinases, a novel family of dual specificity protein kinases. J. Biol. Chem. 273: 25893-25902.
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CHROMOSOMAL LOCATION

Genetic locus: DYRK2 (human) mapping to 12q15.

SOURCE

Dyrk2 (949C2E) is a mouse monoclonal antibody raised against a KLH-coupled peptide corresponding to amino acids 105-135 of DYRK2 of human origin.

PRODUCT

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

APPLICATIONS

Dyrk2 (949C2E) is recommended for detection of DYRK2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for Dyrk2 siRNA (h): sc-39009, Dyrk2 shRNA Plasmid (h): sc-39009-SH and Dyrk2 shRNA (h) Lentiviral Particles: sc-39009-V.

Molecular Weight of Dyrk2 isoform 1/2: 67/60 kDa.

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.