10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DYRK1B Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP16734c

Specification

DYRK1B Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q9Y463

DYRK1B Antibody (Center) Blocking Peptide - Additional Information

Gene ID 9149

Other Names
Dual specificity tyrosine-phosphorylation-regulated kinase 1B, Minibrain-related kinase, Mirk protein kinase, DYRK1B, MIRK

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DYRK1B Antibody (Center) Blocking Peptide - Protein Information

Name DYRK1B

Synonyms MIRK

Function
Dual-specificity kinase which possesses both serine/threonine and tyrosine kinase activities. Plays an essential role in ribosomal DNA (rDNA) double-strand break repair and rDNA copy number maintenance (PubMed:33469661). During DNA damage, mediates transcription silencing in part via phosphorylating and enforcing DSB accumulation of the histone methyltransferase EHMT2 (PubMed:32611815). Enhances the transcriptional activity of TCF1/HNF1A and FOXO1. Inhibits epithelial cell migration. Mediates colon carcinoma cell survival in mitogen-poor environments. Inhibits the SHH and WNT1 pathways, thereby enhancing adipogenesis. In addition, promotes expression of the gluconeogenic enzyme glucose-6-phosphatase catalytic subunit 1 (G6PC1).

Cellular Location
Nucleus. Nucleus, nucleolus. Chromosome. Note=Localizes to sites of double-strand breaks (DSBs) following DNA damage.

Tissue Location
Highest expression in skeletal muscle, testis, heart and brain with little expression in colon or lung. Expressed in a variety of tumor cell lines.

DYRK1B Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

DYRK1B Antibody (Center) Blocking Peptide - Images

DYRK1B Antibody (Center) Blocking Peptide - Background

DYRK1B is a member of the DYRK family of protein kinases.DYRK1B contains a bipartite nuclear localization signal and isfound mainly in muscle and testis. The protein is proposed to beinvolved in the regulation of nuclear functions. Three isoforms ofDYRK1B have been identified differing in the presence of twoalternatively spliced exons within the catalytic domain. [providedby RefSeq].

DYRK1B Antibody (Center) Blocking Peptide - References

Lauth, M., et al. Nat. Struct. Mol. Biol. 17(6):718-725(2010)Yang, C., et al. Carcinogenesis 31(4):552-558(2010)Jin, K., et al. J. Biol. Chem. 284(34):22916-22925(2009)Deng, X., et al. Cancer Res. 69(8):3317-3324(2009)Janumyan, Y., et al. J. Biol. Chem. 283(49):34108-34120(2008)