

Recombinant Human DYRK1A

Cat. No. DYRK1A-26456TH Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant fragment of Human DYRK1A protein with an N terminal proprietary tag; predicted mwt: 35.53 kDa inclusive of tag.

Species Human

Source Wheat Germ

ProteinLength 90 amino acids

Description This gene encodes a member of the Dual-specificity tyrosine phosphorylation-regulated kinase (DYRK) family. This member contains a nuclear targeting signal sequence, a protein kinase domain, a leucine zipper motif, and a highly conservative 13-consecutive-histidine repeat. It catalyzes its autophosphorylation on serine/threonine and tyrosine residues. It may play a significant role in a signaling pathway regulating cell proliferation and may be involved in brain development. This gene is a homolog of *Drosophila mnb* (minibrain) gene and rat *Dyrk* gene. It is localized in the Down syndrome critical region of chromosome 21, and is considered to be a strong candidate gene for learning defects associated with Down syndrome. Alternative splicing of this gene generates several transcript variants differing from each other either in the 5' UTR or in the 3' coding region. These variants encode at least five different isoforms.

Molecular Weight 35.530kDa inclusive of tags

Form Liquid

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|---------------------------------|---|
| Purity | Proprietary Purification |
| Storage buffer | pH: 8.00 Constituents: 0.79% Tris HCl, 0.3% Glutathione |
| Storage | Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. |
| Sequences of amino acids | NQGNQAYQNRPVAANTLDFGQNGAMDVNLTVYSNPRQETGIAGHPTYQFSANTGP AHYMTEGHLTMRQGADREESPMTGVCVQQSPVAS |

GENE INFORMATION

| | |
|----------------------------|--|
| Gene Name | DYRK1A dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1A [Homo sapiens] |
| Official Symbol | DYRK1A |
| Synonyms | DYRK1A; dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1A; DYRK, DYRK1, MNBH; dual specificity tyrosine-phosphorylation-regulated kinase 1A; |
| Gene ID | 1859 |
| mRNA Refseq | NM_001396 |
| Protein Refseq | NP_001387 |
| MIM | 600855 |
| Uniprot ID | Q13627 |
| Chromosome Location | 21q22.13 |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



Pathway

Cell Cycle, Mitotic, organism-specific biosystem; G0 and Early G1, organism-specific biosystem; Hedgehog Signaling Pathway, organism-specific biosystem; Mitotic G1-G1/S phases, organism-specific biosystem;

Function

ATP binding; kinase activity; non-membrane spanning protein tyrosine kinase activity; nucleotide binding; protein binding;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA