

Active Recombinant Human DYRK1A Protein, GST-tagged

Cat. No. DYRK1A-2981H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human DYRK1A (NP_001387.2, 1 a.a. - 763 a.a.) full-length recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Species	Human
Source	Insect Cells
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 <i>mnf</i> (minibrain) gene and rat <i>Dyrk</i> 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. [provided by RefSeq, Jul 2008]
Form	Liquid
Bio-activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg(or Mn)/ATP. The

 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

phosphorylated and unphosphorylated substrates were separated and detected by LabChip 3000.

Substrate: DYRKtide-F.

ATP: 100 μ M.

Molecular Mass	112 kDa
Purity	81 % by SDS-PAGE/CBB staining
Applications	Functional Study SDS-PAGE
Storage	Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)

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; hMNB; MNB/DYRK protein kinase; serine/threonine kinase MNB; mnb protein kinase homolog hp86; protein kinase minibrain homolog; dual specificity YAK1-related kinase; serine/threonine-specific protein kinase; MNB; DYRK; HP86; MNBH; MRD7; DYRK1;
Gene ID	1859

 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

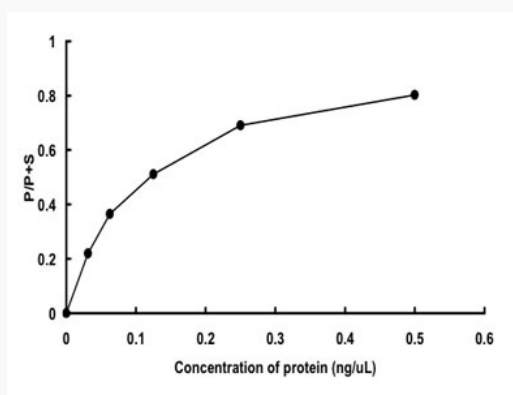
mRNA Refseq NM_001396

Protein Refseq NP_001387

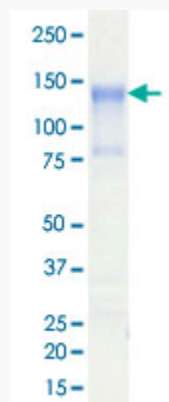
MIM 600855

UniProt ID Q13627

Result of activity analysis



Quality Control Testing



Loading 1 µg protein in SDS-PAGE

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