

## Active Recombinant Human DYRK1A Protein, GST-tagged

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

### SPECIFICATION

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

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phosphorylated and unphosphorylated substrates were separated and detected by LabChip 3000.  
 Substrate: DYRKtide-F.  
 ATP: 100 µM.

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

## GENE INFORMATION

<b>Gene Name</b>	DYRK1A dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1A [ Homo sapiens ]
<b>Official Symbol</b>	DYRK1A
<b>Synonyms</b>	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;
<b>Gene ID</b>	1859

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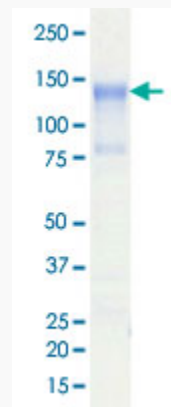
mRNA Refseq [NM\\_001396](#)

Protein Refseq [NP\\_001387](#)

MIM [600855](#)

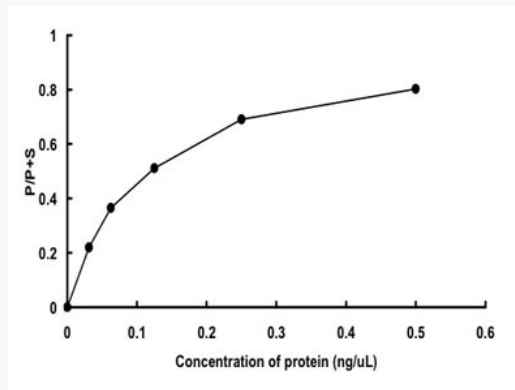
UniProt ID [Q13627](#)

**Quality Control  
Testing**



Loading 1  $\mu$ g protein in SDS-PAGE

**Result of activity  
analysis**



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