

# Recombinant Human DYRK1A Kinase

Catalog No.: RP03419LQ **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	1859	Q13627

### Tags

N-His

### Synonyms

DYRK1A; DYRK; MNB; MNBH; HP86; Dual specificity YAK1-related kinase; Protein kinase minibrain homolog; Dual specificity tyrosine-phosphorylation-regulated kinase 1A

## Product Information

Source	Purification
E. coli	≥ 90 % as determined by SDS-PAGE; ≥ 90 % as determined by HPLC.

Calculated MW	Observed MW
41.8 kDa	30-40 kDa

### Endotoxin

< 1 EU/μg of the protein by LAL method.

### Formulation

Supplied as a 0.22 μm filtered solution in 20 mM HEPES, 150 mM NaCl, 1 mM TCEP, 5% glycerol. (pH 7.5). Contact us for customized product form or formulation.

### Reconstitution

Please use running water to thaw it quickly.

## Contact

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## Background

DYRK1A is 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. DYRK1A has also been shown to modulate plasma homocysteine levels in a mouse model of overexpression. DYRK1A is considered to be a strong candidate gene for learning defects associated with Down syndrome.

## Basic Information

### Description

Recombinant Human DYRK1A Kinase is produced by E. coli expression system. The target protein is expressed with sequence (Ser127-Glu485) of Human DYRK1A (Accession #Q13627) fused with a N-His tag.

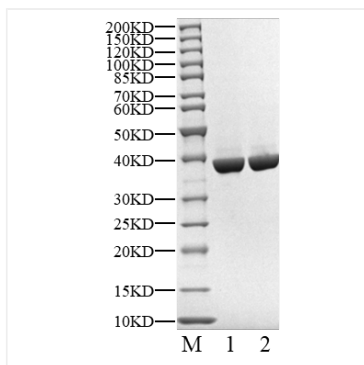
### Bio-Activity

The activity of DYRK1A is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

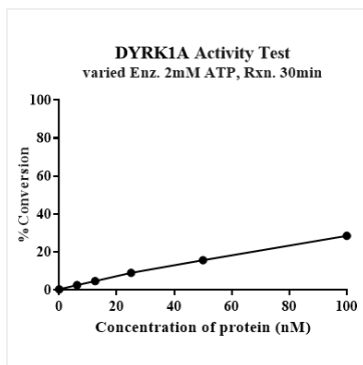
### Storage

Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

## Validation Data



Recombinant Human DYRK1A Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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