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

Dyrk1a antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12625

Product Information

Application	WB
Primary Accession	Q63470
Other Accession	NM_007890, NP_031916
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rabbit, Pig, Chicken, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	85541

Additional Information

Gene ID	25255
Alias Symbol	2310043O08Rik, D16Ertd272e, D16Ertd493e, Dyrk, ENSMUSG00000074897, Gm10783, MGC150253, MGC150254, Mnbh, Mp86, mmb
Other Names	Dual specificity tyrosine-phosphorylation-regulated kinase 1A, 2.7.12.2, Dual specificity YAK1-related kinase, Protein kinase minibrain homolog, MNBH, RP86, Dyrk1a, Dyrk
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Dyrk1a antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Dyrk1a antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

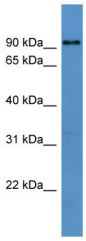
Name	Dyrk1a
Synonyms	Dyrk
Function	Dual-specificity kinase which possesses both serine/threonine and tyrosine kinase activities (PubMed:18938227, PubMed:22998443, PubMed:8631952, PubMed:9748265). Exhibits a substrate preference for proline at position P+1 and arginine at position P-3 (By similarity). Plays an important role in double-strand breaks (DSBs) repair following DNA damage (By similarity). Mechanistically, phosphorylates RNF169 and increases its ability to block

accumulation of TP53BP1 at the DSB sites thereby promoting homologous recombination repair (HRR) (By similarity). Also acts as a positive regulator of transcription by acting as a CTD kinase that mediates phosphorylation of the CTD (C- terminal domain) of the large subunit of RNA polymerase II (RNAP II) POLR2A (By similarity). May play a role in a signaling pathway regulating nuclear functions of cell proliferation (By similarity). Modulates alternative splicing by phosphorylating the splice factor SRSF6 (PubMed:22767602). Has pro-survival function and negatively regulates the apoptotic process. Promotes cell survival upon genotoxic stress through phosphorylation of SIRT1. This in turn inhibits p53/TP53 activity and apoptosis (By similarity). Phosphorylates SEPTIN4, SEPTIN5 and SF3B1 at 'Thr-434' (PubMed:18938227).

Cellular Location Nucleus speckle

Tissue Location Detected in brain (at protein level). Ubiquitous.

Images



WB Suggested Anti-Dyrk1a Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: Mouse Heart