

DYRK2 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5326**Specification**

DYRK2 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O92630
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=67,60;M=67 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

DYRK2 Antibody (N-term) - Additional Information**Gene ID** 8445**Antigen Region**
105-135**Other Names**
DYRK2; Dual specificity tyrosine-phosphorylation-regulated kinase 2**Dilution**
WB~~1:1000**Target/Specificity**
This DYRK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 105-135 amino acids from the N-terminal region of human DYRK2.**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.**Precautions**
DYRK2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.**DYRK2 Antibody (N-term) - Protein Information****Name** DYRK2

Function

Serine/threonine-protein kinase involved in the regulation of the mitotic cell cycle, cell proliferation, apoptosis, organization of the cytoskeleton and neurite outgrowth. Functions in part via its role in ubiquitin-dependent proteasomal protein degradation. Functions downstream of ATM and phosphorylates p53/TP53 at 'Ser-46', and thereby contributes to the induction of apoptosis in response to DNA damage. Phosphorylates NFATC1, and thereby inhibits its accumulation in the nucleus and its transcription factor activity. Phosphorylates EIF2B5 at 'Ser-544', enabling its subsequent phosphorylation and inhibition by GSK3B. Likewise, phosphorylation of NFATC1, CRMP2/DPYSL2 and CRMP4/DPYSL3 promotes their subsequent phosphorylation by GSK3B. May play a general role in the priming of GSK3 substrates. Inactivates GYS1 by phosphorylation at 'Ser-641', and potentially also a second phosphorylation site, thus regulating glycogen synthesis. Mediates EDVP E3 ligase complex formation and is required for the phosphorylation and subsequent degradation of KATNA1. Phosphorylates TERT at 'Ser-457', promoting TERT ubiquitination by the EDVP complex. Phosphorylates SIAH2, and thereby increases its ubiquitin ligase activity. Promotes the proteasomal degradation of MYC and JUN, and thereby regulates progress through the mitotic cell cycle and cell proliferation. Promotes proteasomal degradation of GLI2 and GLI3, and thereby plays a role in smoothened and sonic hedgehog signaling. Plays a role in cytoskeleton organization and neurite outgrowth via its phosphorylation of DCX and DPYSL2. Phosphorylates CRMP2/DPYSL2, CRMP4/DPYSL3, DCX, EIF2B5, EIF4EBP1, GLI2, GLI3, GYS1, JUN, MDM2, MYC, NFATC1, p53/TP53, TAU/MAPT and KATNA1. Can phosphorylate histone H1, histone H3 and histone H2B (in vitro). Can phosphorylate CARHSP1 (in vitro).

Cellular Location

Cytoplasm. Nucleus. Note=Translocates into the nucleus following DNA damage

Tissue Location

Testis, after the onset of spermatogenesis.

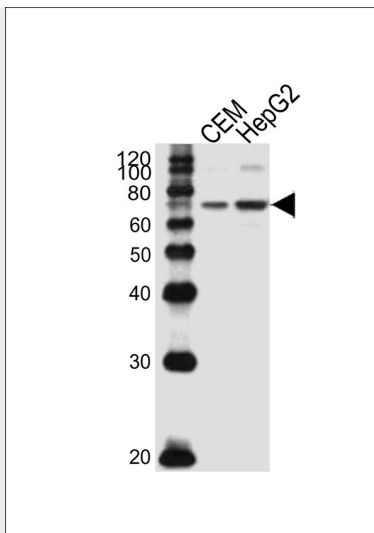
DYRK2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DYRK2 Antibody (N-term) - Images





Western blot analysis of lysates from CEM,HepG2 cell line (from left to right), using DYRK2 Antibody (P46)(Cat. #AW5326). AW5326 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.

DYRK2 Antibody (N-term) - Background

DYRK2 belongs to a family of protein kinases whose members are presumed to be involved in cellular growth and/or development. The family is defined by structural similarity of their kinase domains and their capability to autophosphorylate on tyrosine residues. DYRK2 has demonstrated tyrosine autophosphorylation and catalyzed phosphorylation of histones H3 and H2B in vitro.

DYRK2 Antibody (N-term) - References

Becker, W., et al., J. Biol. Chem. 273(40):25893-25902 (1998).