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DYRK2 antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI15090

Specification

DYRK2 antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	Q92630
Other Accession	NM_003583, NP_003574
Reactivity	**Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**60kDa KDa**

DYRK2 antibody - C-terminal region - Additional Information

Gene ID 8445

Alias Symbol	**FLJ21217, FLJ21365**

Other Names
Dual specificity tyrosine-phosphorylation-regulated kinase 2, 2.7.12.1, DYRK2

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-DYRK2 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
DYRK2 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

DYRK2 antibody - C-terminal region - 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

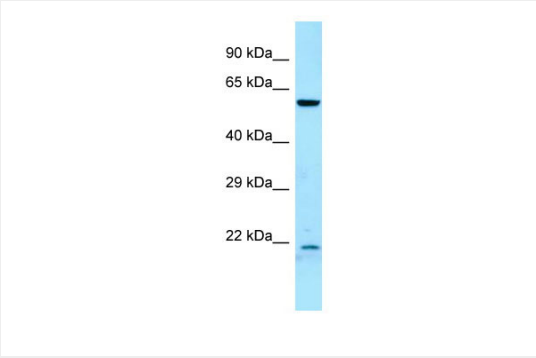
Tissue Location
Testis, after the onset of spermatogenesis.

DYRK2 antibody - C-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DYRK2 antibody - C-terminal region - Images



WB Suggested Anti-DYRK2 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Lung

DYRK2 antibody - C-terminal region - References

Becker W.,et al.J. Biol. Chem. 273:25893-25902(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Becker W.,et al.Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
Woods Y.L.,et al.Biochem. J. 355:609-615(2001).