

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human and rat DYRK2 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 599542
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DYRK2 aa 1-107 Accession # NP_003574
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DYRK2 (Dual-specificity tyrosine [Y] phosphorylation regulated kinase 2) is a 58-62 kDa member of the MNB/DYRK subfamily, CMGC Ser/Thr protein kinase family of enzymes. It is expressed in testis and shows dual substrate specificity; autophosphorylation on Tyr382 to self-activate, and a Ser/Thr phosphorylation of target molecules. Substrates include NFATc, glycogen synthase, and p53. p53 phosphorylation on Ser46 initiates cell apoptosis. Human DYRK2 is 601 amino acids (aa) in length. It contains one kinase catalytic domain (aa 222-535). One isoform variant shows an alternate start site at Met74. This shorter isoform was used for immunization. Thus, over aa 1-107 (or aa 74-180 of the long form), human DYRK2 shares 93% aa identity with mouse DYRK2.

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