

DESCRIPTION

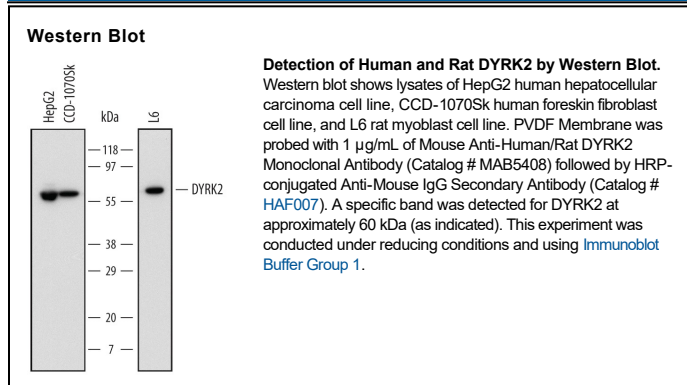
Species Reactivity	Human/Rat
Specificity	Detects human and rat DYRK2 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 599542
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DYRK2 aa 1-107 Accession # NP_003574
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	Immersion fixed paraffin-embedded testis

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.