

**DESCRIPTION**

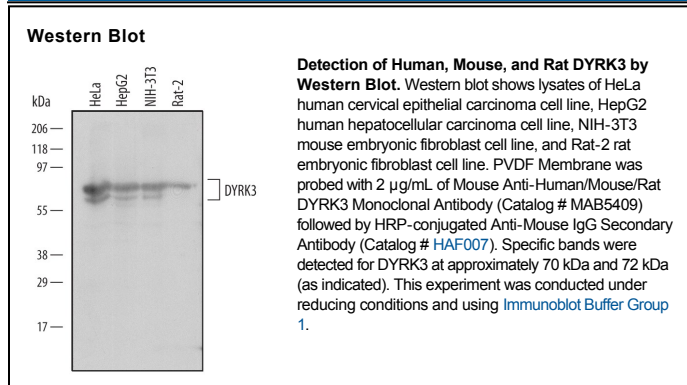
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat DYRK3 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 563518
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human DYRK3 Asn52-Glu167 Accession # O43781
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	See Below

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

DYRK3 (Dual-specificity tyrosine [Y] phosphorylation regulated kinase 3; also REDK) is a 70-72 kDa member of the MNB/DYRK subfamily, CMGC Ser/Thr protein kinase family of enzymes. It is expressed in testis and erythroid-lineage precursors, and shows dual substrate specificity; autophosphorylation on Tyr369 to self-activate, and a Ser/Thr phosphorylation of target molecules. Substrates include CREB and Histone 2B. Human DYRK3 is 588 amino acids (aa) in length and contains one kinase catalytic domain (aa 209-522). There are two potential isoform variants that show either a six aa substitution for aa 1-26, or this same substitution in combination with a premature truncation after Gln263. DYRK3 immunoreactive proteolysis bands of 30 and 40 kDa have been detected in DYRK3-transfected cells. Over aa 52-167, human DYRK3 shares 75% aa identity with mouse DYRK3.