

DESCRIPTION

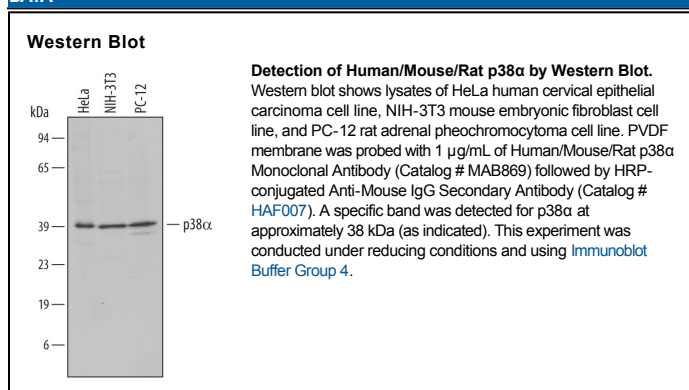
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat p38 α . This antibody does not detect recombinant p38 β , p38 γ or p38 δ .
Source	Monoclonal Mouse IgG _{2B} Clone # 142102
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human p38 α Accession # Q16539
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m 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 μ g/mL	See Below

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

p38 α (also known as MAPK14 or SAPK2A) is a member of the p38 MAPK family which are activated by various environmental stresses and pro-inflammatory cytokines (1). The activation of p38 requires its phosphorylation by MAP kinase kinases (MKKs) or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase (2). The substrates of p38 include transcription regulator ATF2, MEK2, MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response.

References:

1. Han, J. *et al.* (1994) *Science* **265**:808.
2. Ge, B. *et al.* (2002) *Science* **295**:1291.