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Catalogue #	Aliquot Size
M39-16H -20	20 µg
M39-16H -50	50 µg

p38α (K53A), Unactive

Recombinant full-length protein expressed in E.coli

Catalog # M39-16H
Lot # N344-4

Product Description

Recombinant human full-length mutant p38α (K53A) was expressed in E.coli using an N-terminal His tag. This kinase-dead protein is designed for up-stream kinase assay. The p38α gene accession number is NM_139012.

Gene Aliases

RK, p38, EXIP, Mxi2, CSBP1, CSBP2, CSPB1, PRKM14, PRKM15, SAPK2A, p38ALPH

Formulation

Recombinant protein stored in 50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 2mM DTT, 25% glycerol.

Storage and Stability

Store product at –70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

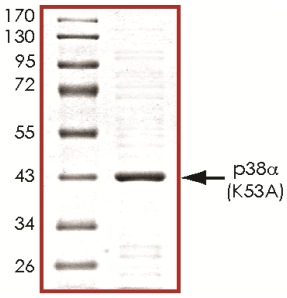
Scientific Background

p38⟨ (SAPK2A) is a member of the p38 MAPK family which are activated by various environmental stresses and proinflammatory 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, MEF2C, and 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 (5).

References

1. Han, J. et al: A MAP kinase targeted by endotoxin and hyperosmolarity in mammalian cells. Science 265: 808-811, 1994.
2. Ge, B. et al: MAPKK-independent activation of p38-alpha mediated by TAB1-dependent autophosphorylation of p38-alpha. Science 295: 1291-1294, 2002.

Purity



The purity of p38α (K53A) was determined to be **>90%** by densitometry, approx. MW **42kDa**.

Upstream Active Kinases

The p38a (K35A) protein can be utilized as a substrate for the active protein kinases MKK4 and MKK6.

p38α (K53A), Unactive

Recombinant full-length human protein expressed in E.coli

Catalog Number	M39-16H
Specific Lot Number	N344-4
Purity	>90%
Concentration	0.2 µg/µl
Stability	1yr At –70°C from date of shipment
Storage & Shipping	Store product at –70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
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