

## p38 $\alpha$ , Unactive

Full-length recombinant protein expressed in E. coli cells

Catalog # M39-14U

Lot #P141-3

### Product Description

Recombinant full-length, tag-free human p38 $\alpha$  was expressed in E. coli cells. The gene accession number is [NM\\_139012](#).

### Gene Aliases

CSBP1; CSBP2; CSPB1; PRKM14; PRKM15; SAPK2A; MAPK14

### Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol.

### Storage and Stability

Store product at  $-70^{\circ}\text{C}$ . 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.

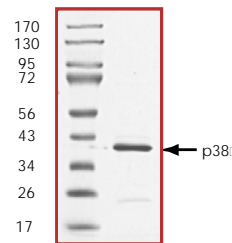
### Scientific Background

p38 $\alpha$  (SAPK2A) is a member of the p38 MAPK family which are activated by various environmental stresses and proinflammatory cytokines (1). The activation of p38 $\alpha$  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 $\alpha$  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

- Han, J. et al: A MAP kinase targeted by endotoxin and hyperosmolarity in mammalian cells. *Science* 265: 808-811, 1994.
- 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 was determined to be **>90%** by densitometry. Approx. MW **38kDa**.

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Catalog Number

M39-14U

Specific Lot Number

P141-3

Purity

>90%

Concentration

0.2  $\mu\text{g}/\mu\text{l}$

Stability

1yr At  $-70^{\circ}\text{C}$  from date of shipment

Storage & Shipping

Store product at  $-70^{\circ}\text{C}$ . 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.

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