

## 12-4290: Phospho-SEK1/MKK4 (Ser257) (Clone: C5) rabbit mAb

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	SEK1MKK4S257-C5
<b>Application :</b>	FACS,WB
<b>Reactivity :</b>	Human, Mouse
<b>Conjugate :</b>	Unconjugated
<b>Format :</b>	Purified
<b>Alternative Name :</b>	Dual specificity mitogen-activated protein kinase kinase 4, MAP kinase kinase 4, MAPKK4, JNK-activating kinase 1, MEK4, SAPKK1, JNKK1, PRKMK4, MAP2K4, SERK1, SKK1
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	A synthetic phospho-peptide corresponding to residues surrounding Ser257 of human phospho SEK1/MKK4

### Description

SEK1, in cooperation with MKK7, activates JNK by tyrosine phosphorylation in response to cellular stress signals, including osmotic stress, DNA damage, cytokines, and heat shock. SEK1 itself is activated by serine phosphorylation by MAP3Ks, including MEKK1, MLKs, ASK1, and TAK1. In response to TNF alpha stimulation in melanoma cells, filamin interacts with SEK1 as a scaffold protein. SEK1 plays an important role in T cell signaling pathways. Both SEK1-dependent and independent pathways operate for SAPK activation in response to different cellular stresses and stimuli. SEK1 also plays an important role in embryonic development. SEK1 may activate c-jun and c-Fos during mammalian embryonic liver development.

### Product Info

<b>Amount :</b>	20 $\mu$ l / 200 $\mu$ l
<b>Content :</b>	1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA
<b>Storage condition :</b>	Store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

1  $\mu$ g/mL - 0.001  $\mu$ g/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml, more than 200 western blots)

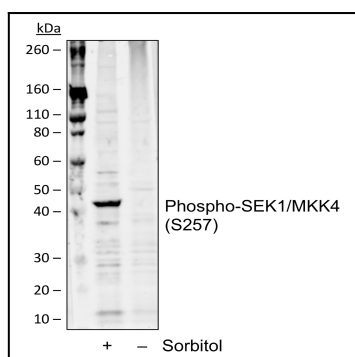


Fig-1: Western blot analysis of THP1 cell extract, untreated or treated with sorbitol using phospho-SEK1/MKK4 (Ser257) antibody SEK1MKK4S257-C5 at 0.05  $\mu$ g/mL.

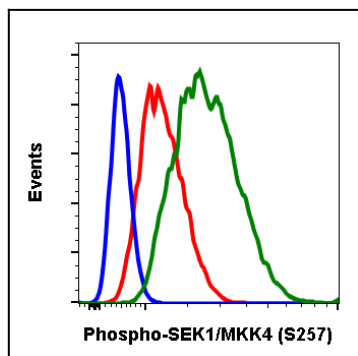


Fig 2 : Flow cytometric analysis of 3T3 cells secondary antibody only negative control (blue) or treated with imatinib (red) or with pervanadate (green) using Phospho-SEK1/MKK4 (Ser257) antibody SEK1MKK4S257-C5 at 0.1  $\mu\text{g}/\text{mL}$ .

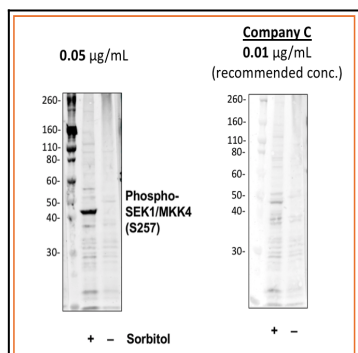


Fig-3: Western blot analysis of THP1 cell extract untreated or treated with sorbitol using 0.05  $\mu\text{g}/\text{mL}$  Phospho-SEK1/MKK4 (Ser257) antibody SEK1MKK4S257-C5 or Company C antibody at 0.01  $\mu\text{g}/\text{mL}$  (manufacturer's recommended concentration) developed using the same exposure.

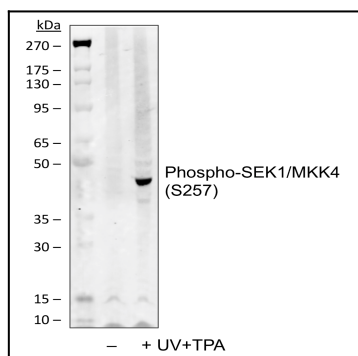


Fig-4: Western blot analysis of COS7 cell extract, untreated or treated with UV plus TPA using phospho-SEK1/MKK4 (Ser257) antibody SEK1MKK4S257-C5 at 0.05  $\mu\text{g}/\text{mL}$ .