

# Immunotag™ Phospho-SEK1/MKK4 (Thr261) Antibody

Antibody Specification	
Catalog No.	ITA1091
Product Description	Immunotag™ Phospho-SEK1/MKK4 (Thr261) Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Phospho-SEK1/MKK4 (Thr261)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,ELISA
Recommended Dilution	WB 1:500-1:2000 IHC 1:50-1:200
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human SEK1/MKK4 around the phosphorylation site of Threonine 261
Specificity	Phospho-SEK1/MKK4 (Thr261) Antibody detects endogenous levels of SEK1/MKK4 only when phosphorylated at Threonine 261
Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	MAP2K4
Accession No.	P45985

## Antibody Specification

Alternate Names	c Jun N terminal kinase kinase 1; C-JUN N-terminal kinase kinase 1; Dual specificity mitogen activated protein kinase kinase 4; Dual specificity mitogen-activated protein kinase kinase 4; JNK Activated Kinase 1; JNK activating kinase 1; JNK-activating kinase 1; JNKK; JNKK1; MAP kinase kinase 4; Map2k4; MAPK ERK kinase 4; MAPK/ERK kinase 4; MAPKK 4; MAPKK4; MEK 4; MEK4; Mitogen activated protein kinase kinase 4; MKK 4; MKK4; MP2K4_HUMAN; PRKMK4; SAPK ERK kinase 1; SAPK/ERK kinase 1; SAPKK 1; SAPKK1; SEK1; SERK1; SKK1; Stress activated protein kinase kinase 1;
Description	Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. Essential component of the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. With MAP2K7/MKK7, is the one of the only known kinase to directly activate the stress-activated protein kinase/c-Jun N-terminal kinases MAPK8/JNK1, MAPK9/JNK2 and MAPK10/JNK3. MAP2K4/MKK4 and MAP2K7/MKK7 both activate the JNKs by phosphorylation, but they differ in their preference for the phosphorylation site in the Thr-Pro-Tyr motif. MAP2K4 shows preference for phosphorylation of the Tyr residue and MAP2K7/MKK7 for the Thr residue. The phosphorylation of the Thr residue by MAP2K7/MKK7 seems to be the prerequisite for JNK activation at least in response to proinflammatory cytokines, while other stimuli activate both MAP2K4/MKK4 and MAP2K7/MKK7 which synergistically phosphorylate JNKs. MAP2K4 is required for maintaining peripheral lymphoid homeostasis. The MKK/JNK signaling pathway is also involved in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis. Whereas MAP2K7/MKK7 exclusively activates JNKs, MAP2K4/MKK4 additionally activates the p38 MAPKs MAPK11, MAPK12, MAPK13 and MAPK14.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	44kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.