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SignalChem
Specialists in Signaling Proteins

Anti-JNK2/3

Rabbit Polyclonal Antibody

Catalog # M34-63R
Lot # V336-3

Cited Applications

- Western blot (1:1000 dilution)

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity

Recognizes JNK2 and JNK3 protein

Cross Reactivity

- Western blot of human JNK2 and JNK3

JNK2 and JNK3 from other species may also be detectable

Host

Rabbit

Immunogen

C-terminal peptide of JNK3 conjugated to ovalbumin

Formulation

TBS pH 7.2, 50% glycerol

Stability

Store at 4^{0}C (add 0.1% NaN_3) for several months, and at -20^{0}C for longer periods. 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.

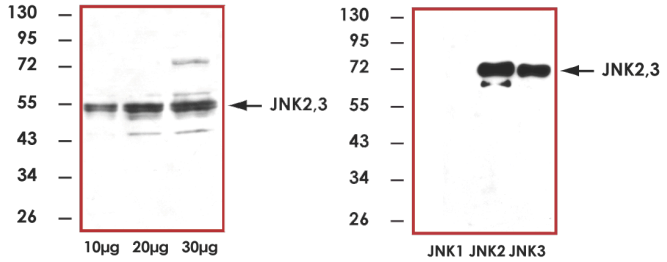
Scientific Background

JNK2 and JNK3 are members of the c-Jun N-terminal kinases (JNKs) which are part of the mitogen-activated protein (MAP) kinase family, and regulate signal transduction in response to environmental stress. JNK2 binds to the c-Jun transactivation domain and phosphorylates it on Ser-63 and Ser-73 (1). JNK2 has been shown to play an important role in disease processes. JNK2 plays a role in ventricular hypertrophy and is thought to be involved in hypertensive cardiac disease (2). JNK3 phosphorylates various transcription factors such as ATF2, Elk-1 and members of the Jun family (3). Activation and nuclear localization of JNK3, a neuronal-specific isoform of JNK, has been associated with hypoxic and ischemic damage of CA1 neurons in the hippocampus. Knockout mice lacking JNK3 showed reduced apoptosis of hippocampal neurons and reduced seizure induced by kainic acid, a glutamate-receptor agonist (4).

References

1. Sluss, H K. et al: Signal transduction by tumor necrosis factor mediated by JNK protein kinases. Mol Cell Biol. 1994 Dec;14(12):8376-84.
2. Vogel, V. et al: Cardiac hypertrophy in the Prague-hypertensive rat is associated with enhanced JNK2 but not ERK tissue activity. Kidney Blood Press Res. 2001;24(1):52-6.
3. Gupta, S. et al: Selective interaction of JNK protein kinase isoforms with transcription factors. EMBO J. 1996 Jun 3;15(11):2760-70.
4. Yang, D D. et al: Absence of excitotoxicity-induced apoptosis in the hippocampus of mice lacking the Jnk3 gene. Nature. 1997 Oct 23;389(6653):865-70.

Sample Data



Representative western blot with Anti-JNK2/3 (1:1000) using 10 µg, 20 µg, 30 µg of Jurkat cell lysate and 20 ng of JNK1, JNK2, and JNK3 recombinant protein.

Anti-JNK2/3

Mouse Monoclonal Antibody

Catalog Number	M34-63R
Specific Lot Number	V336-3
Purification	Affinity chromatography
Concentration	1.0 µg/µL
Stability	1yr At –20°C from date of shipment
Storage & Shipping	Store product at –20°C. For optimal storage, aliquot antibody 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 ice packs.