

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat p46 and p54 JNK when dually phosphorylated at sites homologous to T183/Y185 of JNK1 and JNK2, and T221/Y223 of JNK3 in Western blots.
Source	Monoclonal Rabbit IgG Clone # 1006A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Phosphopeptide containing human, rat, and mouse JNK1 T183/Y185 site
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The c-Jun N-terminal Kinases (JNKs) are part of the MAPK (mitogen-activated protein kinase) system that transmits signals from the extracellular milieu to both the cytoplasm and nucleus of the cell. Following perturbation at the cell membrane, MEKKs/MAP3Ks are initially activated, followed by their activation of MKKs/MAP2Ks, and MKKs activation of MAPKs/MAP(1)Ks. There are three classes of MAPKs: ERKs, p38 Kinases and JNKs. JNKs are 45-55 kDa protein products of three genes which, through alternative splicing, generate up to 10 possible isoforms. The phosphorylation targets for MAPKs vary, but include p53, c-MYC, ATF2 and c-Jun, the latter molecule representing the namesake for the enzyme group. The three human JNKs share approximately 80% aa sequence identity. JNKs from human, mouse and rat all contain a conserved Met-Met-Thr(183)-Pro-Tyr(185)-Val-Val motif that undergoes dual phosphorylation by MMK4 and MMK7 to activate the different JNKs. Activated by environmental stresses and inflammatory cytokines, JNKs translocate to the nucleus where they regulate the activity of several transcription factors; including the c-Jun component of AP-1 and ATF-2.

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