

DESCRIPTION

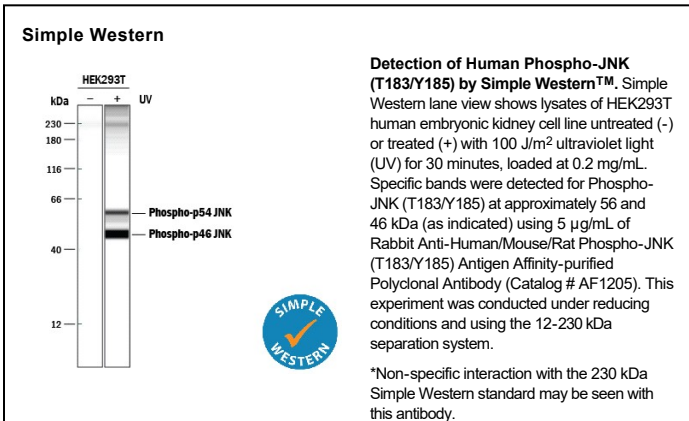
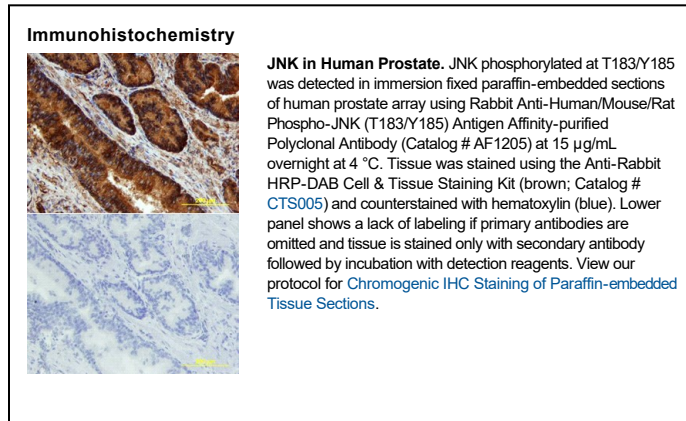
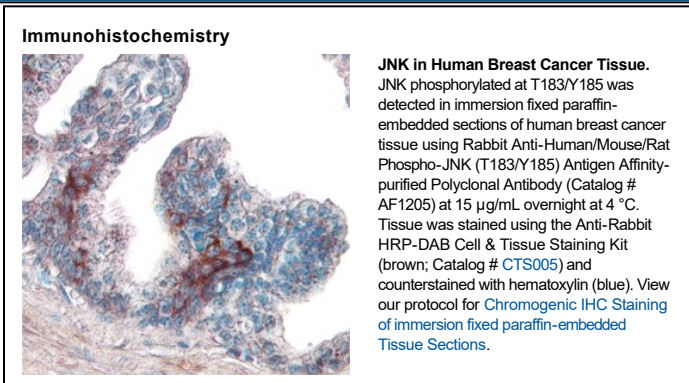
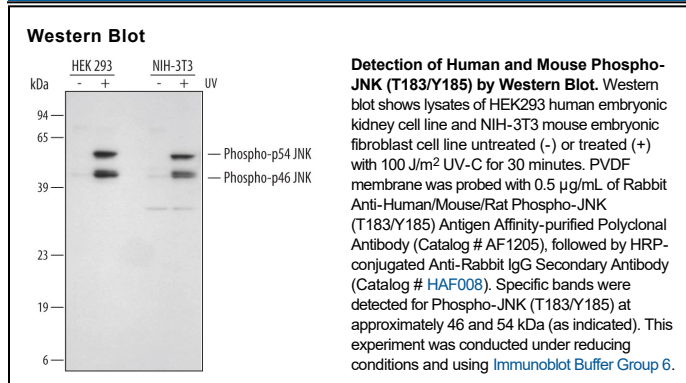
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat p46 and p54 JNK when dually phosphorylated at sites homologous to T183/Y185 of JNK1 and JNK2, and T221/Y223 of JNK3 in Western blots.
Source	Polyclonal Rabbit IgG
Purification	Antigen and protein A Affinity-purified
Immunogen	Phosphopeptide containing human, rat, and mouse JNK1 T183/Y185 site
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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, MEKs/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.