

Product datasheet

Recombinant mouse JNK1 protein ab60304

[1 References](#) [5 Images](#)

Description

Product name	Recombinant mouse JNK1 protein
Biological activity	Specific activity: 124 nmol/min/mg. (lot K110-1) Specific activity: 92 nmol/min/mg. (lot C341-2)
Purity	> 90 % Densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Mouse

Specifications

Our **Abpromise guarantee** covers the use of **ab60304** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE Western blot
Form	Liquid
Additional notes	<u>ab43598</u> (Human ATF2 protein fragment) can be utilized as a substrate for assessing Kinase activity

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

Function

Responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating a number of transcription factors, primarily components of AP-1 such as JUN, JDP2 and ATF2 and thus regulates AP-1 transcriptional activity. In T-cells, JNK1 and JNK2 are required for polarized differentiation of T-helper cells into Th1 cells (By similarity). Phosphorylates heat shock factor protein 4 (HSF4).

JNK1 isoforms display different binding patterns: beta-1 preferentially binds to c-Jun, whereas alpha-1, alpha-2, and beta-2 have a similar low level of binding to both c-Jun or ATF2. However, there is no correlation between binding and phosphorylation, which is achieved at about the same efficiency by all isoforms.

Sequence similarities

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.

Contains 1 protein kinase domain.

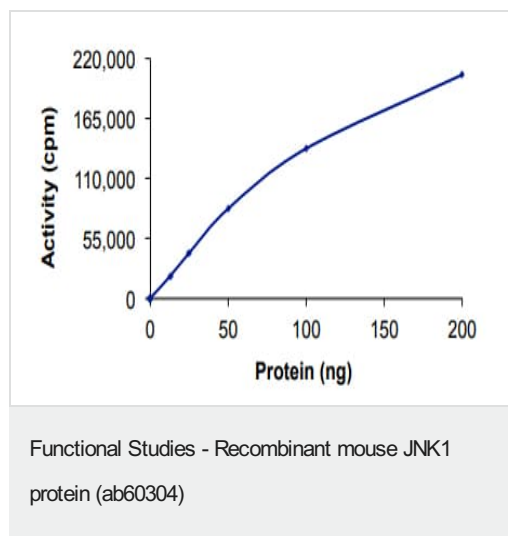
Domain

The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.

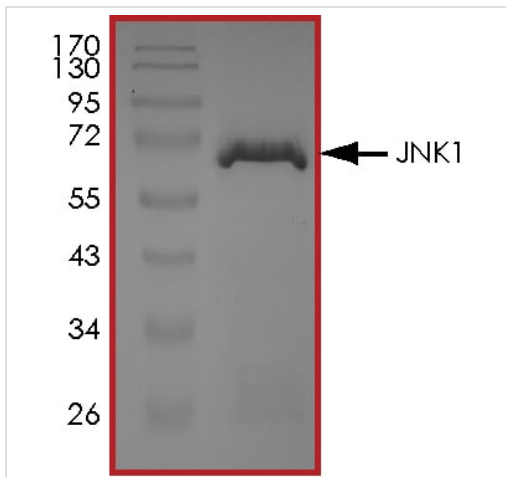
Post-translational modifications

Dually phosphorylated on Thr-183 and Tyr-185, which activates the enzyme.

Images

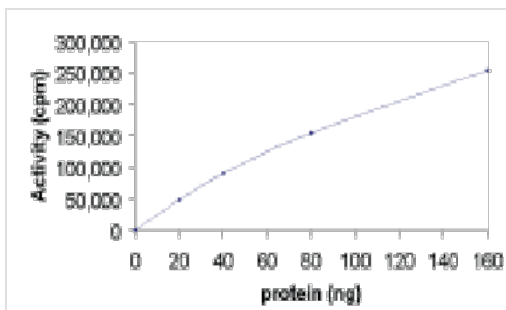


The specific activity of JNK1 (ab60304) was determined to be 94 nmol/min/mg as per activity assay protocol



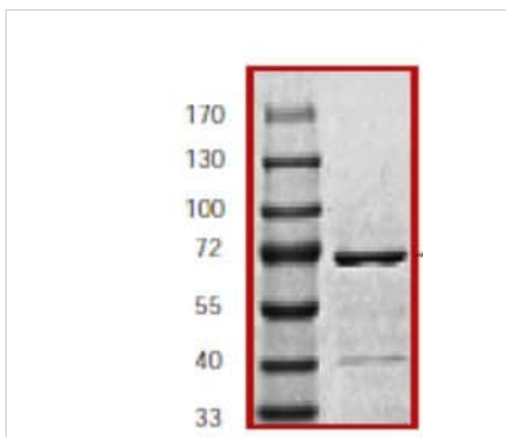
SDS PAGE analysis of ab60304

SDS-PAGE - Recombinant mouse JNK1 protein
(ab60304)



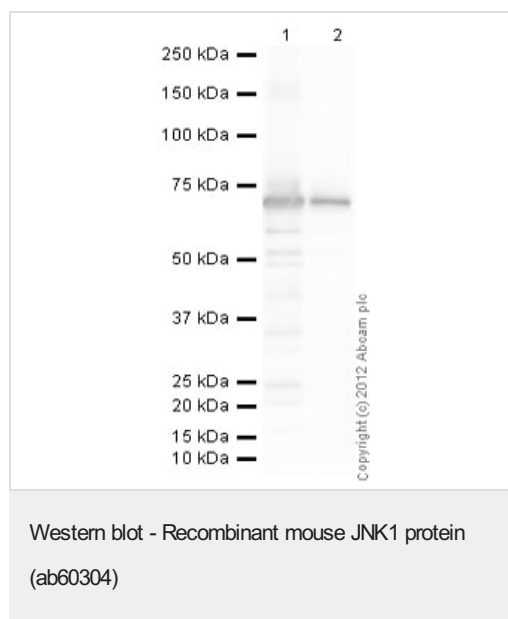
Sample Kinase assay plot.

Functional Studies - Recombinant mouse JNK1
protein (ab60304)



ab60304 on SDS-PAGE.

SDS-PAGE - Recombinant mouse JNK1 protein
(ab60304)



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