



## Product Datasheet

<b>Product Name</b>	JUN N-terminal Kinase 2 alpha 1 Human Recombinant
<b>Cata No</b>	CB500827
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Mitogen-activated protein kinase 9, EC 2.7.11.24, Stress-activated protein kinase JNK2, c-Jun N-terminal kinase 2, JNK-55, JNK2, JNK2A, JNK2B, PRKM9, JNK2BETA, p54aSAPK, JNK2ALPHA, MAPK9, JUN N-terminal Kinase 2 alpha 1, JNK2a-1.

### Description

JUN N-terminal Kinase 2 is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase targets specific transcription factors, and thus mediates immediate-early gene expression in response to various cell stimuli. It is most closely related to MAPK8, both of which are involved in UV radiation induced apoptosis, thought to be related to the cytochrome c-mediated cell death pathway. This gene and MAPK8 are also known as c-Jun N-terminal kinases. This kinase blocks the ubiquitination of tumor suppressor p53, and thus it increases the stability of p53 in nonstressed cells. Studies of this gene's mouse counterpart suggest a key role in T-cell differentiation. Four alternatively spliced transcript variants encoding distinct isoforms have been reported.

JNK2 is a soluble 48 kDa protein that is activated in response to cellular stress, radiation and growth factors. JNK2 binds to the amino terminal activation domains of c-jun or ATF2 regulating AP-1 transcriptional activity.

This protein is the full-length form of the protein with a C-terminal His-tag (His-tag on COOH terminus).

### Physical Appearance

Sterile Filtered clear solution.

### Purity

Greater than 85% as determined by SDS-PAGE. Mass spectrometry of tryptic digest products for identity determination.

### Formulation

25mM HEPES at pH 8.0, 150mM NaCl, 2mM DTT and 10% glycerol.

### Sequence

MSDSKCD SQF YSVQVADSTF TVLKRYQQLK  
PIGSGAQGIV CAAFDTVLGI NVAVKLSRP  
FQNQTHAKRAYRELVLLKCV NHKNIISLLN  
VFTPQKTL EE FQDVYLV MEL MDANLCQVIH  
MELDHERMSY LLYQMLCGIKHLHSAGIIHR  
DLKPSNIVVK SDCTLKILDF GLARTACTNF  
MMTPYVVTRY YRAPEVILGM  
GYKENVDIWSVGCIMGELVK GCVIFQGTDH  
IDQWNKVIEQ LGTPSAEFMK KLQPTVRNYV  
ENRPKYPGIK FEELFPDWIFPSESERDKIK  
TSQARDLLSK MLVIDPKRI SVDEALRHPY  
ITVWYDPAEA EAPPPQIYDA  
QLEEREHAIEEWKELIYKEV MDWEERSKNG  
VVKDQPSDAA VSSNATPSQS SSINDISSMS  
TEQTLASDTD SSLDASTGPLEGCRGGGSHH  
HHHH

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