

## ProQinase™ JNK1 K55R/K56R

c-Jun N-terminal kinase 1

### Recombinant Protein Kinase Substrate

HGNC Symbol: MAPK8

Synonyms: PRKM8, SAPK1

Product No.: 0524-0000-1

Lot: 004

**Description:** Human JNK1, full length, amino acids M<sub>1</sub>-Q<sub>384</sub> (as in [NCBI/Protein](#) entry NP\_002741.1), inactivated by K55R and K56R mutations, N-terminal HIS6 fusion protein with a TEV cleavage site, expressed in E.coli

**Theoretical MW<sub>Fusion Protein</sub>:** 46466 Da

**Expression host:** E.coli

**Purification:** Immobilized Metal Affinity Chromatography

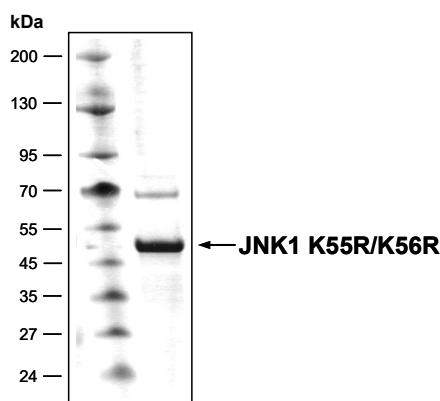
**Storage buffer:** 50 mM HEPES pH 7.5, 100 mM NaCl, 1 mM DTT, 10 % glycerol

**Storage temperature:** -80°C

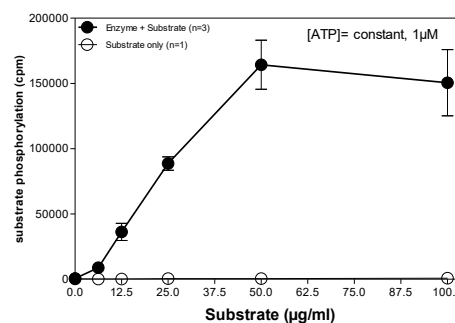
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10 µl are not advisable. Avoid repeated freeze-thaw cycles!

**Protein concentration:** 0.686 µg/µl  
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

**Substrate LOT004:**  
**Coomassie stain**



### Phosphorylation of JNK1 K55R/K56R Lot004 by MKK4 Radiometric filter binding assay



#### Assay conditions:

70 mM HEPES-NaOH, pH 7.5  
3 mM MgCl<sub>2</sub>  
3 mM MnCl<sub>2</sub>  
3 µM Na-orthovanadate  
1.2 mM DTT  
50 µg/ml PEG<sub>20,000</sub>  
ATP: 1 µM  
JNK1 K55R/K56R: variable concentration  
Kinase: 2 µg/ml  
MSFC membrane (Millipore)

#### Field of application:

JNK1 K55R/K56R has been validated for use in radiometric in-vitro kinase activity assays. It is not successfully validated for use in ATP-consumption based kinase activity assays.

Sequence information

| JNK1 K55R/K56R Recombinant Fusion Protein Amino Acid Sequence |            |            |            |            |            |            |            |     |
|---------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|-----|
| 1                                                             | MHHHHHH    | AMT        | ENLYFQGAMS | RSKRDNNFY  | VEIGDSTFTV | LKRYQNLKPI | SGSAQGIVCA | 60  |
| 61                                                            | AYDAILERNV | AI         | RRLSRPFQ   | NQTHAKRAYR | ELVLMKCVNH | KNIIGLLNVF | TPQKSLEEFQ | 120 |
| 121                                                           | DVYIVMELMD | ANLCQVIQME | LDHERMSYLL | YQMLCGIKHL | HSAGIIHRDL | KPSNIVVKSD |            | 180 |
| 181                                                           | CTLKILDFGL | ARTAGTSFMM | TPYVVTRYR  | APEVILMGY  | KENVDLWSVG | CIMGEMVCHK |            | 240 |
| 241                                                           | ILFPGRDYID | QWNKVIEQLG | TPCPEFMKKL | QPTVRTYVEN | RPKYAGYSFE | KLFPDVLFP  |            | 300 |
| 301                                                           | DSEHNKLKAS | QARDLLSKML | VIDASKRISV | DEALQHPYIN | VWYDPSEAEA | PPPKIPDKQL |            | 360 |
| 361                                                           | DEREHTIEEW | KELIYKEVMD | LEERTKNGVI | RGQPSPLAQV | QQ         |            |            | 420 |

Red: 6HIS

Green: TEV site

blue: JNK1 K55R/K56R

boxed: K55R/K56R point mutations

Recombinant Proteins

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