Biomyx Technology
Innovation & Convenience for Life Sciences

Biomyx Technology
10054 Mesa Ridge Court, Suite 112
San Diego, CA 92121
Phone: (858) 457-3658 FAX: (858) 457-3485
www.biomyx.net

Human c-Jun Protein (1-79)

Recombinant GST-cJun (1-79)

Catalog# J1100S (100μg)
J1100L (1.0mg)
Lot#: 303011

Materials Provided:

Each kit contains:
1. GST-cJun: 100μg in 100μl (J1100S) or 1.0mg in 1.0ml (J1100L) of 25mM Tris (pH7.4) containing 0.5mM EDTA, 50mM NaCl, 1mM DTT, 10% glycerol at 1.0mg/ml.
2. 10X Kinase Buffer: 1.0ml of 250mM HEPES buffer (pH7.4) containing 100mM MgOAc, 0.5mM ATP, 10mM DTT.
3. Product Information Sheet.

Formulation: Frozen liquid
Concentration: 1.0mg/ml
Preservative: 10% Glycerol
MW: 35 kDa
Purity: >90% (SDS-PAGE)
Source: Recombinant protein expressed in *E. coli*.

Shipping and Storage:
Shipped frozen on dry ice. Upon receiving, store the product at −80°C until use. If not all the content is to be used, aliquot the original vial and refreeze at −80°C after the initial thaw. Working aliquot can be stored at 2-8°C for no more than 2 weeks. Avoid repeated freezing and thawing.

Description: GST-cJun(1-79) is a recombinant fusion protein expressed in *E. coli*, consisting of GST(Glutathione-S-Transferase) followed by a Thrombin cleavage (underlined) and the activation domain (amino acid residues 1-79) of human c-Jun. The amino acid sequence of the fusion protein is shown below with JNK phosphorylation sites underlined.

GST-LVPRGS QTAKGETTFY DDALNASFLP
SESGPYGYSN PKILKQSMTL NLADPVGSLK
PHLRAKNSDL LT**S**PDVGLLK LASPELERL

Usage: GST-cJun (1-79) serves as a highly specific substrate for c-Jun N-terminal kinases (JNK) due to the presence of a JNK docking region. It's not phosphorylated by ERKs and p38 MAPKs. Therefore, it's a preferred substrate for *in vitro* JNK activity assays. Standard reaction conditions are performed by incubating the following mixture with various amounts of JNK at 30^0C for 30 min in a total volume of 40 μl, followed by SDS-PAGE analysis. A standard reaction mixture contains: 5μl of 10X Kinase Buffer provided, 2μCi [P^{32}]-ATP, 2μg of GST-cJun protein and various amounts of JNK (e.g. 0.1μg of recombinant JNK, cell lysates or immunoprecipitates.

Related Products:
pKG-cJun GST fusion expression clone (1-79):
Cat#: P6050

Further information:

c-Jun:
Angel, P., et al., 1988, ***Nature***, 332: 166-171

GST fusion Vectors:
Guan KL, Dixon JE.1991. ***Anal Biochem*** 192:262-7
Smith DB, Johnson KS, 1988. ***Gene*** 67: 31-40

Signal transduciton and JNK assay:
Boulikas T., 1995, ***Crit. Rew. Eukar. Gene Expr***., 5: 1-77
Derijard B. *et al*, 1994, ***Cell***, 76: 1025-1037
Derijard B. *et al*, 1995, ***Science***, 267: 682-685
Hibi M., et al., 1993, ***Gene Dev***, 7: 2135-2148
Lin A. et al, 1995, ***Science***, 268: 286-290
Kyriakis J. M. *et al*., 1994, ***Nature***, 369: 156-160
Minden A. *et al*, 1994, ***Science***, 266: 1719-1722
Robbins D. J., et al, 1993 ***J. Biol Chem***, 268: 5097-5106
Sanchez et al., 1994, ***Nature***, 372: 794-798
Westwick J. K. et al., 1994, ***Proc Natl Acad Sci USA***, 91: 6030-6034
Yan M. et al, 1994, ***Nature***, 372: 798-800