Recombinant Human JNK1/MAPK8 Protein (GST Tag)

Catalog No. PKSH031427

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description		
Synonyms	JNK;JNK-46;JNK1;JNK1A2;JNK21B1/2;PRKM8;SAPK1;SAPK1c	
Species	Human	
Expression Host	Baculovirus-Insect Cells	
Sequence	Met 1-Arg 427	
Accession	NP_620637.1	
Calculated Molecular Weight	75.0 kDa	
Observed molecular weight	65 kDa	
Tag	N-GST	
Bioactivity	Not validated for activity	
Properties		
Purity	> 90 % as determined by reducing SDS-PAGE.	
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.	
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.	
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.	
Formulation	Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0, 25% glycerol Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.	
Reconstitution	Please refer to the printed manual for detailed information.	

Data

KDa	MK	R
116 66.2	17	_
45.0	-	
35.0	-	
25.0	-	- 1
18.4 14.4	-	

> 90 % as determined by reducing SDS-PAGE.

Background

Mitogen-activated protein kinase 8 (MAPK8), also known as JNK1, 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

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proliferation, differentiation, transcription regulation and development. The protein kinases JNK1 has been found to serve as critical molecular links between obesity, metabolic inflammation, and disorders of glucose homeostasis. It is critically involved in the promotion of diet-induced obesity, metabolic inflammation and beta-cell dysfunction. The selective deficiency of JNK1 in the murine nervous system is sufficient to suppress diet-induced obesity. Genetic analysis indicates that the effects of JNK1 can be separated from effects of JNK1 on obesity. JNK1 is a potential pharmacological target for the development of drugs that might be useful for the treatment of metabolic syndrome, and type 2 diabetes. Furthermore, JNK1 plays a major role in the hypoxic cellular damage. JNK1 protein might be an attractive target for antihypoxic therapy in increasing resistance to many pathological conditions and diseases, leading to the oxygen deficit.

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