



## Recombinant Protein Technical Manual

Recombinant Human JNK1/MAPK8 Protein (GST Tag)  
RPES0910

### Product Data:

**Product SKU:** RPES0910

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** NP\_620637.1

### Protein Information:

**Molecular Mass:** 75 kDa

**AP Molecular Mass:** 65 kDa

**Tag:** N-GST

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** JNK;JNK-46;JNK1;JNK1A2;JNK21B1/2;PRKM8;SAPK1;SAPK1c

## Immunogen Information:

**Sequence:** Met 1-Arg 427

## 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 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.