# abcam

# Product datasheet

# Recombinant human p38 gamma/MAPK12 protein ab125651

# 1 References 2 Images

#### **Description**

**Product name** Recombinant human p38 gamma/MAPK12 protein

**Biological activity** The specific activity of ab125651 was determined to be 220 nmol/min/mg.

**Purity** > 90 % Densitometry.

Purity was determined to be >90% by densitometry. Affinity purified.

**Expression system** Baculovirus infected Sf9 cells

Accession P53778

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

Predicted molecular weight 71 kDa including tags

Amino acids 1 to 367

## **Specifications**

Our Abpromise guarantee covers the use of ab125651 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** Western blot

Functional Studies

SDS-PAGE

Form Liquid

#### **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

 $Constituents: 0.31\% \ Glutathione, 0.002\% \ PMSF, 0.004\% \ DTT, 0.79\% \ Tris \ HCI, 0.003\% \ EDTA,$ 

25% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

1

#### General Info

**Function** Responds to activation by environmental stress and pro-inflammatory cytokines by

phosphorylating downstream targets. Plays a role in myoblast differentiation and also in the down-regulation of cyclin D1 in response to hypoxia in adrenal cells suggesting MAPK12 may inhibit cell

proliferation while promoting differentiation.

**Tissue specificity** Highly expressed in skeletal muscle and heart.

Sequence similarities Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase

subfamily.

Contains 1 protein kinase domain.

**Domain**The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the

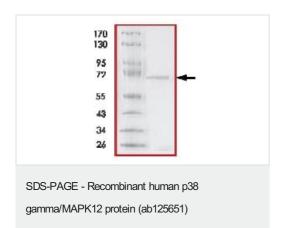
MAP kinases.

Post-translational modifications

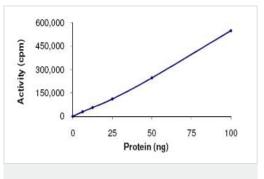
Dually phosphorylated on Thr-183 and Tyr-185, which activates the enzyme.

**Cellular localization** Cytoplasm. Mitochondrion. Mitochondrial when associated with SH3BP5.

#### **Images**



SDS-PAGE analysis of ab125651.



The specific activity of ab125651 was determined to be 220 nmol/min/mg by Kinase Assay.

Functional Studies - Recombinant human p38 gamma/MAPK12 protein (ab125651)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors