
Recombinant Human ERK3 / MAPK12 / P38-gamma Protein**Cat.NO.: TP08333**

3th Edition

Synonyms:ERK-6;ERK3;ERK6;MAPK12;P38GAMMA;PRKM12;SAPK-3;SAPK3

Description:ERK3, also known as MAPK12 and p38-gamma, belongs to the protein kinase superfamily, CMGC Ser/Thr protein kinase family and MAP kinase subfamily. ERK3 is highly expressed in skeletal muscle and heart. ERK3 is a serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK12 is one of the four p38 MAPKs which play an important role in the cascades of cellular responses evoked by extracellular stimuli such as proinflammatory cytokines or physical stress leading to direct activation of transcription factors such as ELK1 and ATF2. Accordingly, p38 MAPKs phosphorylate a broad range of proteins and it has been estimated that they may have approximately 200 to 300 substrates each. MAPK12 is required for the normal kinetochore localization of PLK1, prevents chromosomal instability and supports mitotic cell viability. MAPK12-signaling is also positively regulating the expansion of transient amplifying myogenic precursor cells during muscle growth and regeneration.

Form:PBS**Molecular Weight:**42.1 kDa**Sequences:**Met 1-Leu 367**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.