Datasheet for ABIN7159984

anti-MAPK12 antibody (AA 314-367)

3 Images

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Overview

Quantity:	100 µg
Target:	MAPK12
Binding Specificity:	AA 314-367
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MAPK12 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Mitogen-activated protein kinase 12 protein (314-367AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	>95%, Protein G purified

Target Details

Target:	MAPK12
Alternative Name:	MAPK12 (MAPK12 Products)
Background:	Background: 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

Target Details

	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. Some of the targets are downstream kinases such as MAPKAPK2, which are activated through phosphorylation and further phosphorylate additional 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. Phosphorylates DLG1. Following osmotic shock, MAPK12 in the cell nucleus increases its association with nuclear DLG1, thereby causing dissociation of DLG1-SFPQ complexes. This function is independent of its catalytic activity and could affect mRNA processing and/or gene transcription to aid cell adaptation to osmolarity changes in the environment. Regulates UV-induced checkpoint signaling and repair of UV-induced DNA damage and G2 arrest after gamma-radiation exposure. MAPK12 is involved in the regulation of SLC2A1 expression and basal glucose uptake in L6 myotubes, and negatively regulates SLC2A4 expression and contraction-mediated glucose uptake in adult skeletal muscle. C-Jun (JUN) phosphorylation is stimulated by MAPK14 and inhibited by MAPK12, leading to a distinct AP-1 regulation. 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. Aliases: ERK 6 antibody, ERK-6 antibody, ERK6 antibody, Extracellular signal-regulated kinase 6 antibody, MAP kinase 12 antibody, MAP kinase p38 gamma antibody, MAPK 12 antibody, Mapk12 antibody, Mitogen Activated Protein Kinase 12 antibody, Mitogen activated protein kinase p38 gamma antibody, Mitogen-activated protein kinase 12 antibody, Mitogen-activated protein kinase p38 gamma antibody, MK12_HUMAN antibody, P38 GAMMA antibody, P38GAMMA antibody, PRKM12 antibody, SAPK 3 antibody, SAPK-3 antibody, SAPK3 antibody, Stress Activated Protein Kinase 3 antibody, Stress-activated protein kinase 3 antibody
UniProt:	P53778
Pathways:	MAPK Signaling, Neurotrophin Signaling Pathway, Regulation of Muscle Cell Differentiation, Hepatitis C, BCR Signaling, S100 Proteins

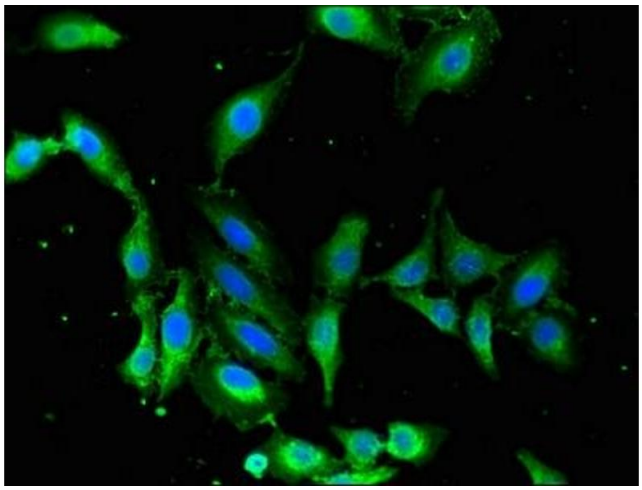
Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:20-1:200, IF:1:50-1:200,
Restrictions:	For Research Use only

Handling

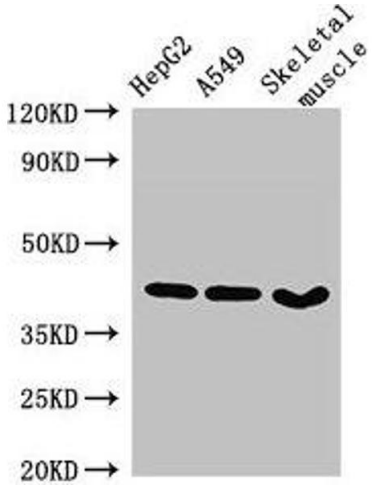
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

Image 1. Immunofluorescent analysis of Hela cells using ABIN7159984 at dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L)



Western Blotting

Image 2. Western Blot Positive WB detected in: HepG2 whole cell lysate, A549 whole cell lysate, Mouse skeletal muscle tissue All lanes: MAPK12 antibody at 2.7 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 42, 41 kDa Observed band size: 42 kDa

Immunohistochemistry

Image 3. Immunohistochemistry of paraffin-embedded human skeletal muscle tissue using ABIN7159984 at dilution of 1:100

