

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat p38 γ in Western blots. The antibody is highly specific for p38 γ and in Western blots, shows extremely weak cross-reactivity with recombinant p38 α , p38 β , or p38 δ after prolonged exposure to film.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human p38 γ Accession # P53778
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.2 μ g/mL	See Below
Immunocytochemistry	3-15 μ g/mL	See Below
Immunohistochemistry	5-15 μ g/mL	Immersion fixed paraffin-embedded sections of human breast, human skin cancer tissue, and mouse skeletal muscle
Simple Western	2 μ g/mL	See Below

DATA

Western Blot

Detection of Mouse/Rat p38 γ by Western Blot. Western blot shows lysates of PC-12 rat adrenal pheochromocytoma cell line, C6 rat glioma cell line, and C2C12 mouse myoblast cell line. PVDF membrane was probed with 0.2 μ g/mL Rabbit Anti-Human/Mouse/Rat p38 γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1347) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band for p38 γ was detected at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using *Immunoblot Buffer Group 1*.

Western Blot

Detection of human p38 γ by Western Blot. Western blot shows recombinant human p38 β , p38 γ , p38 δ and p38 α (1 ng/lane). PVDF membrane was probed with 0.2 μ g/mL Rabbit Anti-Human/Mouse/Rat p38 γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1347) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band for p38 γ was detected at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using *Immunoblot Buffer Group 1*.

Immunocytochemistry

p38 γ in MCF-7 Human Cell Line. p38 γ was detected in immersion fixed MCF-7 human breast cancer cell line using Rabbit Anti-Human/Mouse/Rat p38 γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1347) at 3 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for *Fluorescent ICC Staining of Cells on Coverslips*.

Simple Western

Detection of Mouse and Rat p38 γ by Simple Western™. Simple Western lane view shows lysates of C2C12 mouse myoblast cell line and PC-12 rat adrenal pheochromocytoma cell line, loaded at 0.2 mg/mL. A specific band was detected for p38 γ at approximately 48 kDa (as indicated) using 2 μ g/mL of Rabbit Anti-Human/Mouse/Rat p38 γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1347). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

p38 mitogen-activated protein kinase (MAPK) γ , also known as p38 γ , MAPK12, SAPK3 and ERK6 is a serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. Plays a role in myoblast differentiation and also in the down-regulation of cyclin D1 in response to hypoxia in adrenal cells.