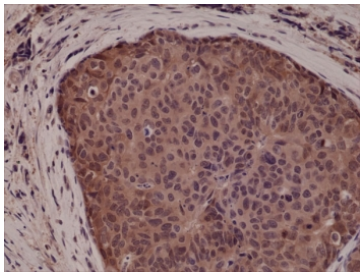
Recombinant p38 Antibody / MAPK14 [clone RM245] (R20266)

Catalog No.	Formulation	Size
R20266-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

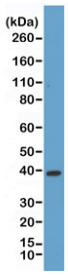
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM245
Purity	Protein A purified from animal origin-free supernatant
UniProt	Q16539, Q15759, P53778
Gene ID	1432, 5600, 6300
Localization	Cytoplasmic, nuclear
Applications	Immunohistochemistry (FFPE): 1:1000-1:5000 (1) Western blot: 1:1000-1:2000
Limitations	This recombinant p38 antibody is available for research use only.



IHC testing of FFPE human breast cancer tissue with recombinant p38 antibody at 1:5000.



Western blot of human HeLa lysate using recombinant p38 antibody at 1:1000. Predicted molecular weight ~38 kDa.

Description

The Recombinant p38 antibody is a recombinant reagent designed to detect total p38 mitogen-activated protein kinase (MAPK), also known as MAPK14. p38 is a serine/threonine kinase that plays a central role in stress-activated signaling pathways. Unlike phospho-specific reagents, which detect only the activated form, the Recombinant p38 antibody recognizes all forms of the protein, making it indispensable for evaluating overall protein expression and for distinguishing changes in phosphorylation status from variations in protein abundance. By targeting MAPK14, this antibody provides a reliable measure of a key regulator in inflammatory and stress response pathways.

MAPK14/p38 belongs to the p38 MAPK family, which includes p38ÃŽÂ± (MAPK14), p38ÃŽÂ², p38ÃŽÂ³, and p38ÃŽÂ´ isoforms. Among these, p38ÃŽÂ± is the most widely studied and is activated in response to pro-inflammatory cytokines, UV radiation, osmotic stress, and other environmental challenges. Once activated by upstream kinases such as MKK3 and MKK6, p38 regulates transcription factors, kinases, and other substrates involved in apoptosis, cytokine production, and cell differentiation. The Recombinant p38 antibody recognizes the protein regardless of phosphorylation state, offering a complementary approach to phospho-specific detection.

In research applications, the Recombinant p38 antibody is widely used in western blotting to quantify baseline expression of p38 across tissues and experimental conditions. In immunofluorescence, it reveals nuclear and cytoplasmic localization patterns that vary depending on cellular state. In immunohistochemistry, the antibody highlights p38 expression in tissue sections, providing insight into disease processes such as chronic inflammation or cancer. By enabling detection of both inactive and activated protein, the Recombinant p38 antibody ensures accurate interpretation of MAPK signaling activity.

MAPK14 has critical roles in immune function and stress adaptation. It regulates transcription factors such as ATF2, MEF2, and p53, influencing genes that govern inflammation, apoptosis, and differentiation. Dysregulation of p38 signaling contributes to autoimmune diseases, neurodegeneration, and tumorigenesis. In oncology, p38 has dual roles, functioning as both a tumor suppressor and a promoter of survival depending on cellular context. By detecting total protein levels, the Recombinant p38 antibody is essential for understanding how MAPK14 expression influences signaling outcomes in health and disease.

This antibody is also valuable in pharmacology, as inhibitors targeting p38 MAPK are under investigation for inflammatory diseases, cancer, and cardiovascular disorders. Synonym terms such as recombinant MAPK14 antibody, recombinant total p38 antibody, and recombinant stress-activated kinase antibody expand product accessibility for researchers using alternate nomenclature.

By delivering validated and reproducible detection, the Recombinant p38 antibody provides a dependable tool for analyzing stress-activated kinase biology. NSJ Bioreagents supplies this reagent under strict quality control standards, ensuring reliable performance across western blotting, immunofluorescence, and immunohistochemistry. With its specificity for MAPK14, the Recombinant p38 antibody is indispensable for advancing research into stress signaling and inflammatory regulation.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant p38 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A peptide corresponding to human p38 MAPK was used as the immunogen for this recombinant p38 antibody.

Storage

Store the recombinant p38 antibody at -20oC.

Copyright © NSJ Bioreagents. All rights reserved.