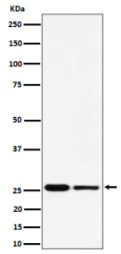
PMF1 Antibody / Polyamine modulated factor 1 [clone 30P63] (FY13197)

Catalog No.	Formulation	Size
FY13197	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30P63
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q6P1K2
Applications	Western Blot : 1:500-1:2000 Immunoprecipitation : 1:50
Limitations	This PMF1 antibody is available for research use only.



Western blot analysis of PMF1 expression in (1) human HeLa cell lysate; (2) mouse RAW264.7 cell lysate using PMF1 antibody. Predicted molecular weight ~23 kDa.

Description

PMF1 antibody detects Polyamine modulated factor 1, encoded by the PMF1 gene. Polyamine modulated factor 1 is a nuclear protein that functions as a transcriptional cofactor, particularly in regulating the activity of the transcription factor

Nrf2 and the antioxidant response element pathway. PMF1 antibody provides researchers with a critical reagent to study oxidative stress, transcriptional regulation, and cancer biology.

Polyamine modulated factor 1 was originally identified for its ability to influence the binding of transcription factors to DNA in the presence of polyamines. Research using PMF1 antibody has demonstrated that it plays an essential role in regulating gene expression by modulating Nrf2 activity and controlling antioxidant response elements. This pathway is central to cellular defense against oxidative damage and environmental stressors, and PMF1 activity is critical in fine-tuning this response.

Beyond its role in transcription, PMF1 has been associated with chromatin organization. Studies with PMF1 antibody have shown that it interacts with histone modifying enzymes, suggesting a role in epigenetic regulation. By influencing both transcription factors and chromatin state, Polyamine modulated factor 1 integrates multiple layers of gene expression control. These findings expand its importance beyond a cofactor to a regulator of genome activity.

PMF1 has also been implicated in cancer. Research using PMF1 antibody has revealed altered expression in several tumor types, including lung, colon, and liver cancers. Elevated levels of PMF1 may enhance antioxidant defenses in tumor cells, promoting survival under stress conditions. Conversely, reduced expression may impair cellular responses to oxidative injury. These dual roles highlight its potential as a biomarker and therapeutic target.

PMF1 antibody is applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting detects endogenous protein levels, immunohistochemistry highlights nuclear localization in tissue samples, and immunofluorescence demonstrates dynamic changes after oxidative stress. These applications make PMF1 antibody indispensable for transcription and stress research.

By supplying validated PMF1 antibody reagents, NSJ Bioreagents supports research into transcriptional regulation, oxidative stress, and cancer. Detection of Polyamine modulated factor 1 provides insight into how nuclear cofactors integrate environmental signals and gene expression.

Application Notes

Optimal dilution of the PMF1 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human PMF1 was used as the immunogen for the PMF1 antibody.

Storage

Store the PMF1 antibody at -20oC.