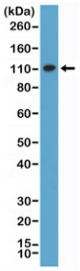
MSH2 Antibody for Western Blot / MSH2 Western Blot Antibody [clone RM375] (R20394)

Catalog No.	Formulation	Size
R20394-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

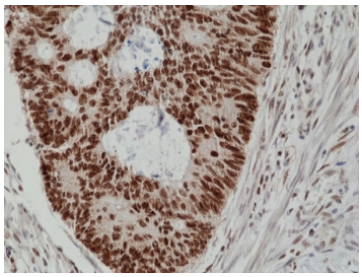
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM375
Purity	Protein A purified from animal origin-free supernatant
UniProt	P43246
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1:200-1:1000 Western Blot : 1:400-1:2000
Limitations	This MSH2 antibody is available for research use only.



MSH2 Antibody for Western Blot (clone RM375) / MSH2 Western Blot Antibody. Western blot analysis of human HeLa cell lysate using MSH2 Antibody for Western Blot (clone RM375) at 1:1000 dilution. A band is detected at approximately 105 kDa, consistent with the predicted molecular weight of MutS homolog 2 / MSH2.



IHC staining of FFPE human colon cancer tissue with recombinant MSH2 antibody at 1:200.

Description

MutS homolog 2 (MSH2) is a nuclear DNA mismatch repair protein encoded by the MSH2 gene and functions as a central component of the cellular machinery that preserves genomic stability. MSH2 Antibody for Western Blot enables sensitive detection of MutS homolog 2 / MSH2 in protein lysates using SDS-PAGE and immunoblotting techniques. Western blot analysis is widely used to evaluate expression of mismatch repair proteins and to confirm the presence of MSH2 in cell lines, tissues, and experimental models investigating DNA repair pathways and genomic integrity.

MSH2 antibody, also referred to as MutS homolog 2 antibody or hMSH2 antibody in the literature, detects a nuclear protein with a predicted molecular weight of approximately 100-105 kDa. In western blot experiments, MSH2 Antibody for Western Blot typically identifies a distinct band near this molecular weight corresponding to the full-length DNA mismatch repair protein. Immunoblot detection allows researchers to confirm protein expression, evaluate relative abundance between samples, and compare MSH2 levels across different cell types or experimental conditions.

Western blot analysis using MSH2 Antibody for Western Blot is particularly valuable for studies investigating DNA mismatch repair activity and microsatellite stability. Reduced or absent MSH2 protein levels can indicate defects in mismatch repair pathways that contribute to genomic instability and tumor development. Because MSH2 forms functional heterodimers with MSH6 or MSH3, western blot detection of MSH2 often accompanies analysis of additional mismatch repair proteins to evaluate the integrity of the entire repair complex.

MSH2 Antibody for Western Blot (clone RM375) is a recombinant rabbit monoclonal antibody developed for immunoblot applications where sensitive and reproducible detection of MSH2 is required. Western blot experiments using this antibody support quantitative comparison of protein expression across multiple lysates and enable evaluation of DNA repair pathway activity in cancer biology, cell cycle studies, and genomic stability research. Detection of MutS homolog 2 by western blot therefore provides a reliable biochemical method to study mismatch repair protein expression and regulation.

Application Notes

The stated application concentrations are suggested starting points. Titration of the MSH2 Antibody for Western Blot may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A mammalian cell expressed recombinant protein fragment within 500 amino acids of the N-terminus of human Msh2 was used as the immunogen for the recombinant MSH2 antibody.

Storage

Store the MSH2 antibody at -20oC.

Alternate Names

MutS homolog 2 antibody, DNA mismatch repair protein MSH2 antibody, hMSH2 antibody, MSH2 mismatch repair antibody