OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AM06094SU-N

MSH2 Mouse Monoclonal Antibody [Clone ID: 1B3=3A2B8C]

Product data:

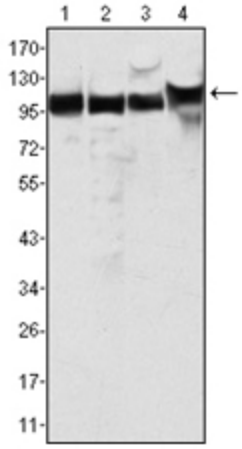
Product Type:	Primary Antibodies
Clone Name:	1B3=3A2B8C
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	**ELISA:** 1/10000. **Western Blot:** 1/500 - 1/2000. **Immunofluorescence:** 1/200 - 1/1000. **Immunohistochemistry on Paraffin Sections:** 1/200 - 1/1000.
Reactivity:	Human, Monkey
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human MSH2 expressed in E. Coli.
Specificity:	Recognizes MSH2
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% Sodium Azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	105 kDa
Gene Name:	mutS homolog 2
Database Link:	Entrez Gene 4436 Human P43246

View online »

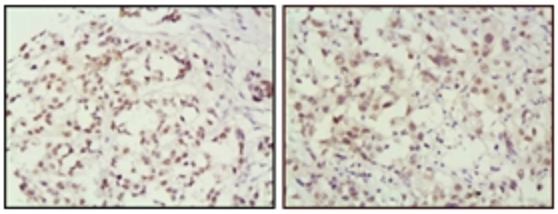
Background: MSH2 is a 100 kDa nuclear antigen and encodes a protein of 934 amino acids. The MSH2 gene is one of 4 known genes encoding proteins involved in the repair of mismatch nucleotides following DNA replication or repair. Mutations in the MSH2 gene contribute to the development of sporadic colorectal carcinoma. MSHS mutations are responsible for 50% of inherited non-polyposis colorectal (HNPCC). The repair of mismatch DNA is essential to maintaining the integrity of genetic information over time. An alteration of microsatellite repeats is the result of slippage owing to strand misalignment during DNA replication and is referred to as microsatellite instability (MSI). These defects in DNA repair pathways have been related to human carcinogenesis. MSH-2 is involved in the initial cognition of mismatch nucleotides during the replication mismatch repair process.

Synonyms: DNA mismatch repair protein Msh2, MutS protein homolog 2

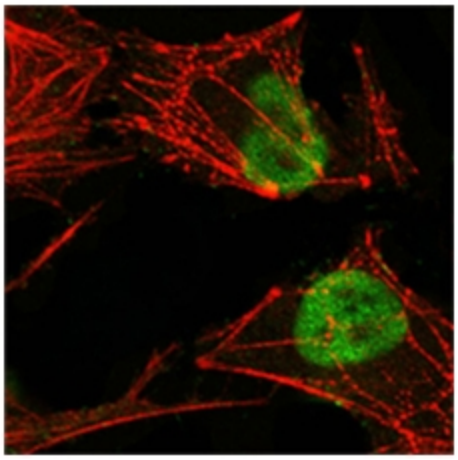
Product images:



Western blot analysis using MSH2 antibody Cat.-No AM06094SU-N against Hela (Lane 1), A549 (Lane 2), A431 (Lane 3) and HEK293 (Lane 4) cell lysate



Immunohistochemical analysis of paraffin-embedded human breast cancer (left) and lung cancer (right) tissues, showing nuclear localization using MSH2 antibody Cat.-No AM06094SU-N with DAB staining.



Confocal Immunofluorescence analysis of Hela cells using MSH2 antibody Cat.-No AM06094SU-N (green), showing nuclear localization. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.