

Product datasheet for **TA384800S**

MRE11 Rabbit Monoclonal Antibody [Clone ID: R03-6H9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	R03-6H9
Applications:	IHC, WB
Recommended Dilution:	WB: 1/1000 IHC: 1/200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	Recombinant protein of human Mre11
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 81 kDa; Observed MW: 81 kDa
Gene Name:	MRE11 homolog A, double strand break repair nuclease
Database Link:	Entrez Gene 4361 Human P49959



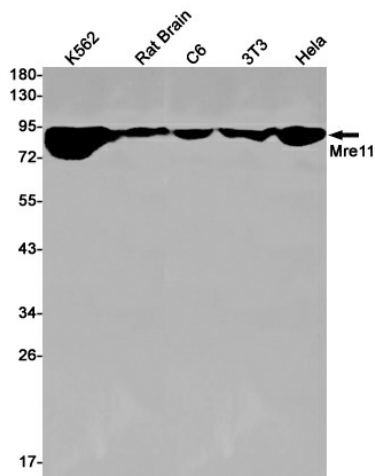
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Background:

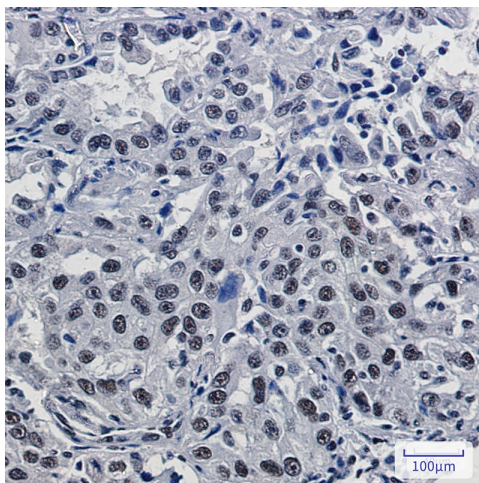
Swiss-Prot Acc.P49959.Component of the MRN complex, which plays a central role in double-strand break (DSB) repair, DNA recombination, maintenance of telomere integrity and meiosis. The complex possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity, which are provided by MRE11. RAD50 may be required to bind DNA ends and hold them in close proximity. This could facilitate searches for short or long regions of sequence homology in the recombining DNA templates, and may also stimulate the activity of DNA ligases and/or restrict the nuclease activity of MRE11 to prevent nucleolytic degradation past a given point (PubMed:9651580, PubMed:9590181, PubMed:9705271, PubMed:11741547, PubMed:29670289). The complex may also be required for DNA damage signaling via activation of the ATM kinase (PubMed:15064416). In telomeres the MRN complex may modulate t-loop formation (PubMed:10888888).

Synonyms:

ATLD; HNGS1; MRE11; MRE11B

Product images:


Western blot analysis of Mre11 in K562, rat Brain, C6, 3T3, HeLa lysates using Mre11 antibody.



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using Mre11 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.