

Rabbit Anti-Mus81 antibody

SL19109R

Product Name:	Mus81
Chinese Name:	核酸内切酶同源蛋白MUS81抗体
Alias:	Crossover junction endonuclease MUS81; FLJ21012; FLJ44872; Mus 81; MUS81; MUS81 Endonuclease Homolog; MUS81_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000ELISA=1:500-1000
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	62kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Mus81:401-500/551
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	MUS81 encodes a helix-hairpin-helix protein involved in the response to UV- and methylation-induced DNA damage in Saccharomyces cerevisiae (1). Mus81 is important for replicational stress tolerance in both budding and fission yeast (2). Specifically, Mus81 associates with Eme1 to form an endonuclease that can process stalled replication forks before they have regressed to form a Holliday junction (2–4). Mus81 associated endonuclease resolves Holliday junctions into linear duplexes by cutting across the junction exclusively on strands of like polarity (2). In addition,

Mus81 protein abundance increases in cells following exposure to agents that block DNA replication (2). Mus81 is involved in the recruitment of Cds1 to aberrant DNA structures where Cds1 modulates the activity of damage tolerance enzymes (4). The gene encoding human MUS81 maps to chromosome 11q13 and encodes a 551 amino acid protein (5).

Function:

Interacts with EME1 and EME2 to form a DNA structure-specific endonuclease with substrate preference for branched DNA structures with a 5'-end at the branch nick. Typical substrates include 3'-flap structures, replication forks and nicked Holliday junctions. May be required in mitosis for the processing of stalled or collapsed replication forks.

Subcellular Location:

Nucleus > nucleolus. Recruited to foci of DNA damage in S-phase cells.

Tissue Specificity:

Widely expressed.

Similarity:

Belongs to the XPF family. Contains 1 ERCC4 domain.

SWISS: O96NY9

Gene ID: 80198

Database links:

Entrez Gene: 80198 Human

Entrez Gene: 528432 Cow

Entrez Gene: 71711 Mouse

Entrez Gene: 293678 Rat

Omim: 606591 Human

SwissProt: Q1JPC1 Cow

SwissProt: Q2KIT9 Cow

SwissProt: Q96NY9 Human

SwissProt: Q91ZJ0 Mouse

SwissProt: Q4KM32 Rat

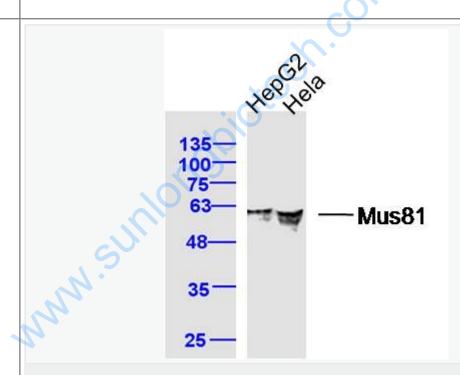
Unigene: 288798 Human

Unigene: 27697 Mouse

Unigene: 137652 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Sample:

HepG2 Cell (Human) Lysate at 40 ug

Hela Cell (Human) Lysate at 40 ug

Primary: Anti-Mus81 (SL19109R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 62 kD

Observed band size: 62 kD

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