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Rabbit Anti-FANCM antibody

SL13143R

Product Name:	FANCM
Chinese Name:	范可尼贫血相关蛋白M抗体
Alias:	FAAP250; Fanconi anemia group M protein; Protein Hef ortholog;
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	232kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FANCM:831-930/2048
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:	PubMed
Product Detail:	Fanconi anemia (FA) is an autosomal recessive disorder characterized by bone marrow failure, birth defects and chromosomal instability. At the cellular level, FA is characterized by spontaneous chromosomal breakage and a unique hypersensitivity to DNA cross-linking agents. The thirteen FA proteins that have been characterized are important for regulating chromosomal stability and genome surveillance. Eight of these proteins, namely FANCA, FANCB, FANCC, FANCE, FANCF, FANCG, FANCL and FANCM, comprise the FA core complex, which catalyzes a key reaction in DNA

repair: the monoubiquitination of FANCD2. FANCM (Fanconi anemia, complementation group M) is a member of the DEAD-box helicase family of proteins and contains a DEAH helicase domain and a nuclease domain. Localizing to chromatin fractions, FANCM is phosphorylated in a cell cycle-dependent manner and is believed to function as an anchor, recruiting the FA core complex to chromatin. Mutations in the gene encoding FANCM can lead to Fanconi anemia.

Function:
FANCM is an ATPase required for FANCD2 ubiquitination, a key reaction in DNA repair. It binds to ssDNA but not to dsDNA.

Subunit:
Belongs to the multisubunit FA complex composed of APITD1, FANCA, FANCB, FANCC, FANCE, FANCF, FANCG, FANCL/PHF9, FANCM, FAAP24 and STRA13/CENPX. The complex is not found in FA patients. Interacts with APITD1/CENPS, FAAP24 and EME1.

Subcellular Location:
Nuclear.

Post-translational modifications:
Phosphorylated; hyperphosphorylated in response to genotoxic stress.

DISEASE:
Defects in FANCM are a cause of Fanconi anemia complementation group M (FANCM) [MIM:614087]. FANCM is a disorder affecting all bone marrow elements and resulting in anemia, leukopenia and thrombopenia. It is associated with cardiac, renal and limb malformations, dermal pigmentary changes, and a predisposition to the development of malignancies. At the cellular level it is associated with hypersensitivity to DNA-damaging agents, chromosomal instability (increased chromosome breakage) and defective DNA repair.

Similarity:
Belongs to the DEAD box helicase family. DEAH subfamily.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.

SWISS:
Q8IYD8

Gene ID:
57697

Database links:

Entrez Gene: 57697Human

	Entrez Gene: 104806Mouse Omim: 609644Human SwissProt: Q8IYD8Human SwissProt: Q8BGE5Mouse Unigene: 509229Human Unigene: 374847Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.