



## Rabbit Anti-FAN1 antibody

SL13137R

<b>Product Name:</b>	FAN1
<b>Chinese Name:</b>	范可尼综合征相关蛋白FAN1抗体
<b>Alias:</b>	6030441H18Rik; Coiled coil domain containing protein MTMR15; DKFZp451H236; DKFZp686K16147; FAN1; FAN1_HUMAN; FANCD2/FANCI associated nuclease 1; FANCD2/FANCI-associated nuclease 1; Fanconi associated nuclease 1; Fanconi-associated nuclease 1; KIAA1018; MTMR 15; MTMR15; Myotubularin related protein 15; Myotubularin-related protein 15.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Zebrafish,Sheep,GPV,
<b>Applications:</b>	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.
<b>Molecular weight:</b>	114kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human FAN1:361-460/1017
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Nuclease required for maintenance of chromosomal stability. Plays a key role in DNA repair of DNA interstrand cross-links (ICL) by being recruited to sites of DNA damage by monoubiquitinated FANCD2. Specifically involved in repair of ICL-induced DNA

breaks by being required for efficient homologous recombination, possibly in the resolution of homologous recombination intermediates. Not involved in DNA double-strand breaks resection. Has both endonuclease activity toward 5'-flaps and 5'-exonuclease activity: may act in concert with the 3'-flap-specific enzymes to unhook the ICL by cleaving the lagging-strand template.

**Function:**

Nuclease required for maintenance of chromosomal stability. Plays a key role in DNA repair of DNA interstrand cross-links (ICL) by being recruited to sites of DNA damage by monoubiquitinated FANCD2. Specifically involved in repair of ICL-induced DNA breaks by being required for efficient homologous recombination, possibly in the resolution of homologous recombination intermediates. Not involved in DNA double-strand breaks resection. Has both endonuclease activity toward 5'-flaps and 5'-exonuclease activity: may act in concert with the 3'-flap-specific enzymes to unhook the ICL by cleaving the lagging-strand template.

**Subunit:**

Interacts with FANCD2 (when monoubiquitinated). Interacts with FANCI, MLH1, MLH3 and PMS2.

**Subcellular Location:**

Nucleus. Localizes at sites of DNA damage following recruitment by monoubiquitinated FANCD2.

**DISEASE:**

Defects in FAN1 are the cause of interstitial nephritis, karyomegalic (KMIN) [MIM:614817]. A rare kidney disease characterized by chronic tubulointerstitial nephritis associated with massively enlarged tubular epithelial cell nuclei. The clinical picture is associated with recurrent upper respiratory tract infections in addition to chronic kidney disease beginning in the third decade of life.

**Similarity:**

Belongs to the FAN1 family.  
Contains 1 UBZ-type zinc finger.  
Contains 1 VRR-NUC domain.

**SWISS:**

Q9Y2M0

**Gene ID:**

22909

**Database links:**

[Entrez Gene: 22909](#)Human

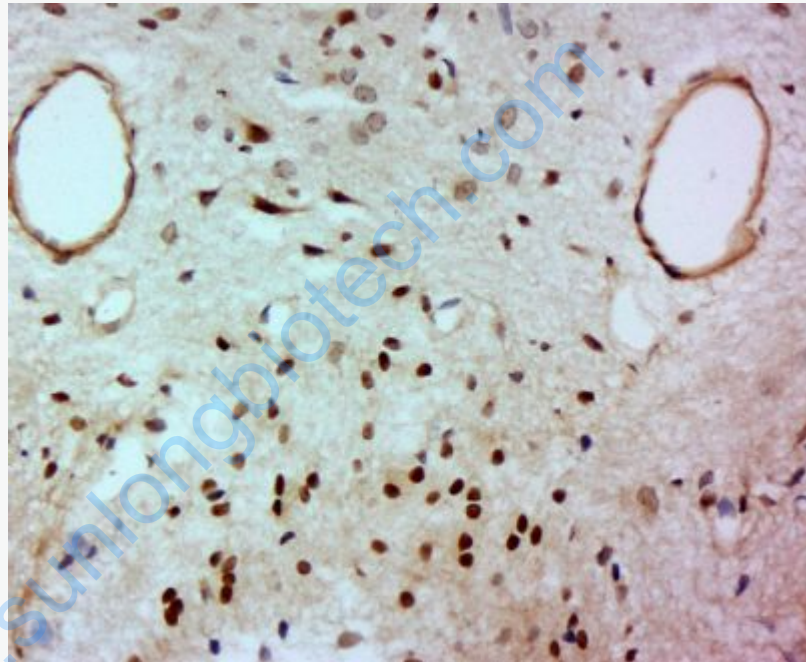
[Oimim: 613534](#)Human

[SwissProt: Q9Y2M0](#)Human

[Unigene: 584863](#)Human

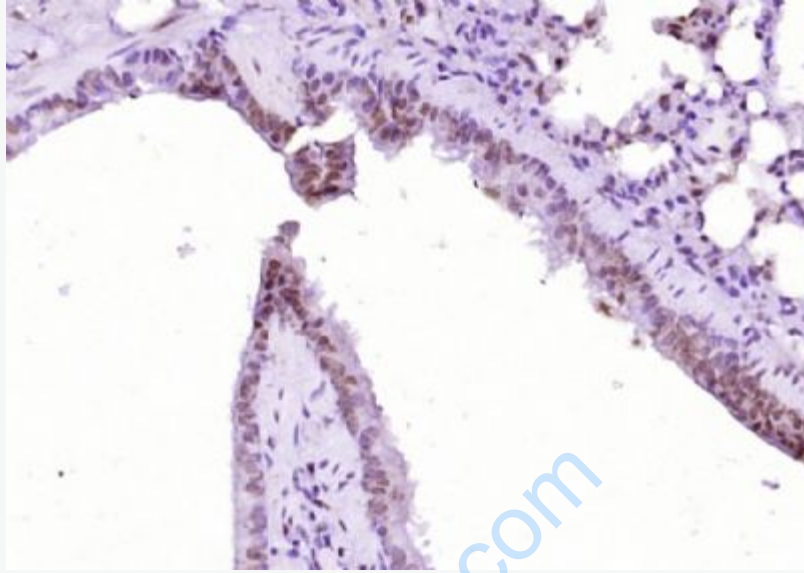
**Important Note:**

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



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FAN1) Polyclonal Antibody, Unconjugated (SL13137R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse lung tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FAN1) Polyclonal Antibody, Unconjugated (SL13137R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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