

SL5353R

Product Name:	phospho-FANCG (Ser383)
Chinese Name:	磷酸化DNA损伤修复基因XRCC9抗体
Alias:	FANCG (phospho S383); p-FANCG (phospho S383); DNA repair protein XRCC9; DNA-repair protein XRCC9; FAG; Fanconi anaemia complementation group G; Protein FACG; X ray repair, complementing defective, in Chinese hamster cells 9; XRCC9.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	69kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human FANCG around the phosphorylation site of Ser383:RF(p-S)PP
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:	FANCG, involved in Fanconi anemia, confers resistance to both hygromycin and mitomycin C. FANCG contains a 5-prime GC-rich untranslated region characteristic of



housekeeping genes. The putative 622-amino acid protein has a leucine-zipper motif at its N-terminus. Fanconi anemia is an autosomal recessive disorder with diverse clinical symptoms, including developmental anomalies, bone marrow failure, and early occurrence of malignancies. A minimum of 8 FA genes have been identified.

## **Function:**

DNA repair protein that may operate in a postreplication repair or a cell cycle checkpoint function. May be implicated in interstrand DNA cross-link repair and in the maintenance of normal chromosome stability. Candidate tumor suppressor gene.

### Subunit:

Belongs to the multisubunit FA complex composed of FANCA, FANCB, FANCC, FANCE, FANCF, FANCG, FANCL/PHF9 and FANCM. The complex is not found in FA patients. In complex with FANCF, FANCA and FANCL, but not with FANCC, nor FANCE, interacts with HES1; this interaction may be essential for the stability and nuclear localization of FA core complex proteins. The complex with FANCC and FANCG may also include EIF2AK2 and HSP70. When phosphorylated at Ser-7, forms a complex with BRCA2, FANCD2 and XRCC3.

### Subcellular Location:

Nucleus. Cytoplasm. Note=The major form is nuclear. The minor form is cytoplasmic.

#### **Tissue Specificity:**

Highly expressed in testis and thymus. Found in lymphoblasts.

# **DISEASE:**

Defects in FANCG are a cause of Fanconi anemia complementation group G (FANCG) [MIM:614082]. 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: Contains 4 TPR repeats.

**SWISS:** 015287

**Gene ID:** 2189

Database links:

Entrez Gene: 2189Human

Omim: 602956Human
SwissProt: O15287Human
Unigene: 591084Human
<b>Important Note:</b> This product as supplied is intended for research use only, not for use in human,
therapeutic or diagnostic applications.

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