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Rabbit Anti-FANCG/Biotin Conjugated antibody

SL4106R-Bio

Product Name	Anti-FANCG/Biotin
Chinese Name	生物素标记的 DNA 损伤修复基因 XRCC9 抗体
Alias	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; FANCG_HUMAN.
Research Area	immunology Chromatin and nuclear signals
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Dog,Pig,Cow)
Applications	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	69kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human FANCG
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** 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.

Database links:
UniProtKB/Swiss-Prot: O15287.1

Important Note:

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