

# Goat Anti-FANCG / XRCC9 Antibody

Peptide-affinity purified goat antibody Catalog # AF1399a

# **Specification**

# Goat Anti-FANCG / XRCC9 Antibody - Product Information

Application WB
Primary Accession 015287

Other Accession NP 004620, 2189

Reactivity
Predicted
Pig, Dog
Host
Clonality
Polyclonal
Concentration
Pig, Dog
Goat
100ug/200ul

Isotype IgG
Calculated MW 68554

# Goat Anti-FANCG / XRCC9 Antibody - Additional Information

#### **Gene ID 2189**

#### **Other Names**

Fanconi anemia group G protein, Protein FACG, DNA repair protein XRCC9, FANCG, XRCC9

#### **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

Goat Anti-FANCG / XRCC9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-FANCG / XRCC9 Antibody - Protein Information

#### Name FANCG

# Synonyms XRCC9

#### **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.



**Cellular Location** 

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

#### **Tissue Location**

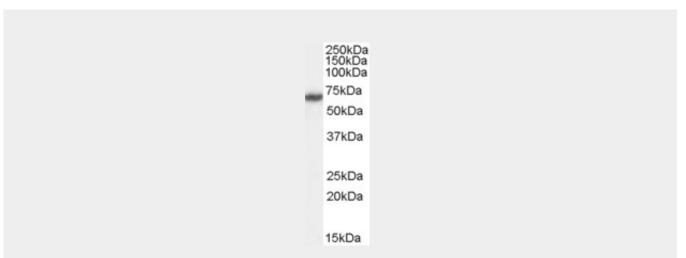
Highly expressed in testis and thymus. Found in lymphoblasts

# Goat Anti-FANCG / XRCC9 Antibody - Protocols

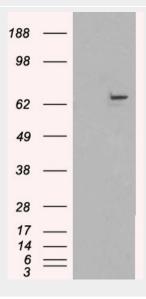
Provided below are standard protocols that you may find useful for product applications.

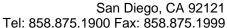
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Goat Anti-FANCG / XRCC9 Antibody - Images



AF1399a (0.5  $\mu$ g/ml) staining of HeLa cell lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.







HEK293 overexpressing FANCG (RC202443) and probed with AF1399a (mock transfection in first lane), tested by Origene.

### Goat Anti-FANCG / XRCC9 Antibody - Background

The Fanconi anemia complementation group (FANC) currently includes FANCA, FANCB, FANCC, FANCD1 (also called BRCA2), FANCD2, FANCE, FANCF, FANCG, FANCI, FANCI (also called BRIP1), FANCL, FANCM and FANCN (also called PALB2). The previously defined group FANCH is the same as FANCA. Fanconi anemia is a genetically heterogeneous recessive disorder characterized by cytogenetic instability, hypersensitivity to DNA crosslinking agents, increased chromosomal breakage, and defective DNA repair. The members of the Fanconi anemia complementation group do not share sequence similarity; they are related by their assembly into a common nuclear protein complex. This gene encodes the protein for complementation group G.

#### Goat Anti-FANCG / XRCC9 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

The Fanconi anemia protein, FANCG, binds to the ERCC1-XPF endonuclease via its tetratricopeptide repeats and the central domain of ERCC1. Wang C, et al. Biochemistry, 2010 Jul 6. PMID 20518486. Comprehensive screen of genetic variation in DNA repair pathway genes and postmenopausal breast cancer risk. Monsees GM, et al. Breast Cancer Res Treat, 2010 May 23. PMID 20496165. Genetic variation in 3-hydroxy-3-methylglutaryl CoA reductase modifies the chemopreventive activity of statins for colorectal cancer. Lipkin SM, et al. Cancer Prev Res (Phila), 2010 May. PMID 20403997.

A histone-fold complex and FANCM form a conserved DNA-remodeling complex to maintain genome stability. Yan Z, et al. Mol Cell, 2010 Mar 26. PMID 20347428.