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Product datasheet for TA336575

FANCA Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1 ug/ml
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide made to an internal portion of human FANCA (within residues 800-900). [UniProt# O15360]
Formulation:	Tris-citrate/phosphate, pH 7, 0.1% Sodium azide. Store at 4C. Do not freeze.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	162 kDa
Gene Name:	Fanconi anemia complementation group A
Database Link:	NP_001018122 Entrez Gene 2175 Human O15360

View online »

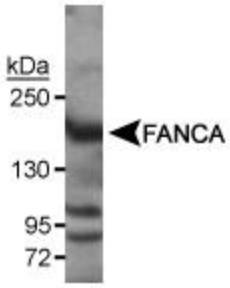
Background: FANCA (Fanconi anemia group A protein) is a DNA repair protein which plays a key role in post-replication repair, cell cycle checkpoint function, interstrand DNA cross-link repair and maintenance of chromosome stability. FANCA belongs to multisubunit FA complex (FANCA, FANCB, FANCC, FANCE, FANCF, FANCG, FANCL/PHF9 and FANCM) which is absent in FA patients. When complexed with FANCF, FANCG and FANCL (but not with FANCC, nor FANCE), FANCA interacts with HES1 and this interaction is crucial for the stability as well as nuclear localization of FA core complex proteins. FANCA-FANCC/FANCG complex may include EIF2AK2 and HSP70 also and it directly interacts with FAAP20/C1orf86. Localized mainly in the nucleus and cytoplasm, it gets phosphorylated upon DNA damage through ATM/ATR. FANCA is a most frequently mutated gene in FA (representing 60-70% of the cases) and over 350 unique mutations have been reported which includes large genomic deletions mediated by unusually high density of ALU repetitions found in its genomic sequence. FANCA sequence alterations or its altered expression has been associated with ovarian cancer and leukemia, and homozygous mutations of FANCA have been linked to esophageal cancer. Defects in FANCA are a cause of Fanconi anemia (FA), a rare disorder characterized by physical abnormalities, bone marrow failure (BMF), increased risk of malignancies, and cellular hypersensitivity to DNA cross-linking agents.

Synonyms: FA; FA-H; FA1; FAA; FACA; FAH; FANCH

Note: This FANCA antibody is useful for Western Blot, where a band can be seen at ~162 kDa.

Protein Families: Druggable Genome

Product images:



Western Blot: FANCA Antibody TA336575 - Detection of FANCA in 293 EBNA cell lysates using TA336575.