Data Sheet (Cat.No.TMAC-01442)

Anti-FANCD2 Antibody (8B144)

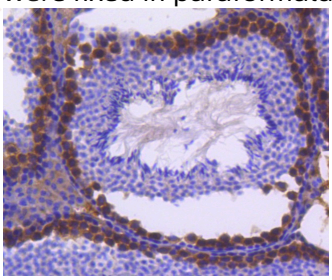
Product Details

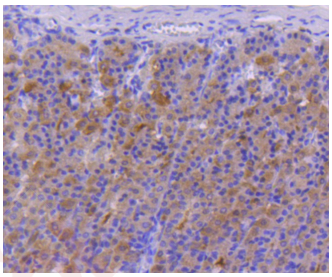
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 166 kDa.
Clone:	8B144
Purification:	ProA affinity purified

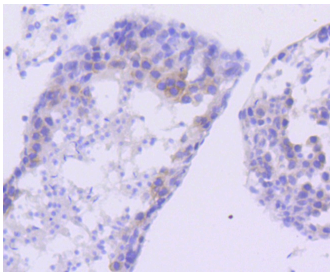
Applications

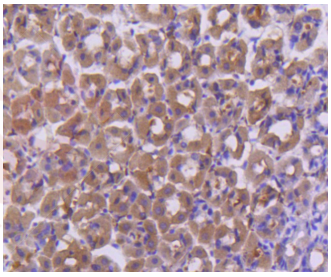
Verified Activity:

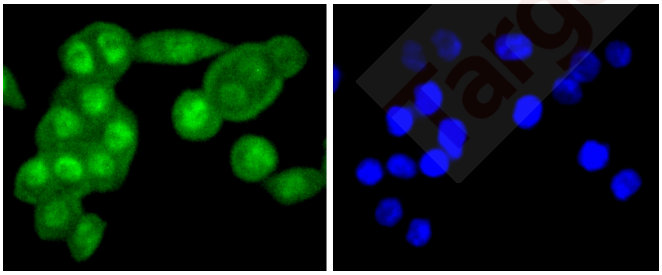
1. Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-FANCD2 antibody. Counter stained with hematoxylin.
2. Immunohistochemical analysis of paraffin-embedded rat stomach tissue using anti-FANCD2 antibody. Counter stained with hematoxylin.
3. Immunohistochemical analysis of paraffin-embedded rat testis tissue using anti-FANCD2 antibody. Counter stained with hematoxylin.
4. Immunohistochemical analysis of paraffin-embedded mouse stomach tissue using anti-FANCD2 antibody. Counter stained with hematoxylin.
5. ICC staining FANCD2 in SW480 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
6. ICC staining FANCD2 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
7. ICC staining FANCD2 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

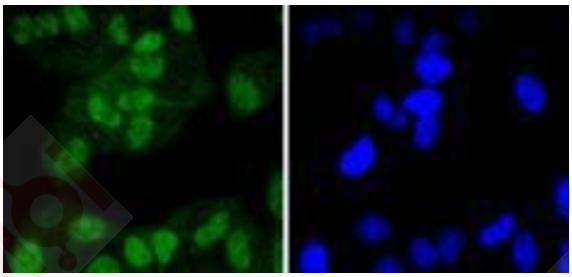


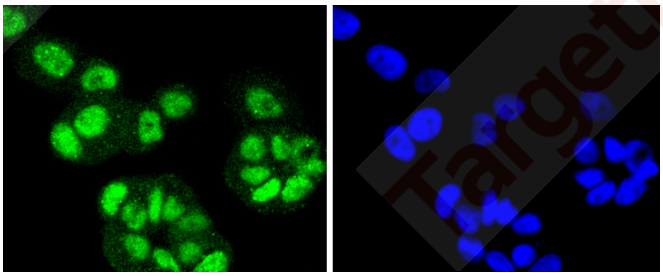












Application:	ICC/IF,IHC,IP,WB
Recommended	WB: 1:500-1000; IHC: 1:50-200; ICC/IF: 1:100-500

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein
Uniprot ID:	Q9BXW9
Synonyms:	FAC D2;FANCD2;FACD 2;FACD;Fanconi anemia complementation group D2;Protein FACD2; FANCD;OTTHUMP00000207925;FACD2_HUMAN;FA 4;Fanconi anemia group D2 protein; OTTHUMP00000158853;FAD;FANCD 2;FACD2;FANCONI ANEMIA COMPLEMENTATION GROUP D; FA D2;Type 4 Fanconi pancytopenia;FANC D2;FANCONI PANCYTOPENIA TYPE 4;FAD2;FA4; DKFZp762A223;FLJ23826

Research Background

Fanconi anemia (FA) is an autosomal recessive disorder character-ized by bone marrow failure, birth defects and chromosomal instability. At the cellular level, FA is characterized by spontaneous chromosomal breakage and a unique hypersensitivity to DNA cross-linking agents. At least 8 complementation groups (A-G) have been identified and 6 FA genes (for subtypes A, C, D2, E, F and G) have been cloned. The FA proteins lack sequence homologies or motifs that could point to a molecular function. Phosphorylation of FANC (Fanconi anemia complementation group) proteins are thought to be important for the function of the FA pathway. Several FA proteins, including FANCA, FANCC, FANCF, and FANCG, interact in a nuclear complex, and this complex is required for the activation (monoubiquitination) of the downstream FANCD2 protein. When monoubiquitinated, the FANCD2 protein co-localizes with the breast cancer susceptibility protein BRCA1 in DNA damage induced foci. In male meiosis, FANCD2 also co-localizes with BRCA1 at synaptonemal complexes. The human FANCD2 gene maps to chromosome 3p25.3, contains 44 exons and encodes a 1,451-amino acid nuclear protein that exists as 2 protein isoforms.