



# Rabbit Anti-FANCD2 monoclonal antibody, clone TO84-19 (CABT-L755)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Target</b>	FANCD2
<b>Immunogen</b>	Recombinant protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Clone</b>	TO84-19
<b>Purification</b>	Protein A purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, ICC/IF, IHC, IP
<b>Molecular Weight</b>	166 kDa
<b>Cellular Localization</b>	Nucleus, Cytoplasm.
<b>Positive Control</b>	SW480, MCF-7, Hela, rat testis tissue, rat stomach tissue, mouse stomach tissue, mouse testis tissue.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

## BACKGROUND

<b>Introduction</b>	Fanconi anemia (FA) is an autosomal recessive disorder characterized 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.
<b>Keywords</b>	DKFZp762A223;FA 4;FA D2;FA4;FAC D2;FACD 2;FACD2;FACD2_HUMAN;FAD;FAD2;FANC D2;FANCD 2;FANCD;FANCD2;FANCONI ANEMIA COMPLEMENTATION GROUP D;Fanconi anemia complementation group D2;Fanconi anemia group D2 protein;FANCONI PANCYTOPENIA TYPE 4;FLJ23826;OTTHUMP00000158853;OTTHUMP00000207925;Protein FACD2;Type 4 Fanconi pancytopenia antibody