

Anti-FANCD2 antibody ab53764

1 图像

概述

产品名称	Anti-FANCD2抗体
描述	兔多克隆抗体to FANCD2
宿主	Rabbit
特异性	ab53764 detects endogenous levels of total FANCD2 protein.
经测试应用	适用于: WB, ELISA
种属反应性	与反应: Human
免疫原	Synthetic non-phosphopeptide derived from human FANCD2 around the phosphorylation site of serine 222 (G-D-S-Q-H).
阳性对照	HT29 cell extracts treated with Calyculin A (50ng/ml, 30mins).

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	Preservative: 0.02% Sodium Azide Constituents: 50% Glycerol, PBS (without Mg ²⁺ and Ca ²⁺), 150mM Sodium chloride, pH 7.4
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab53764于以下的经测试应用

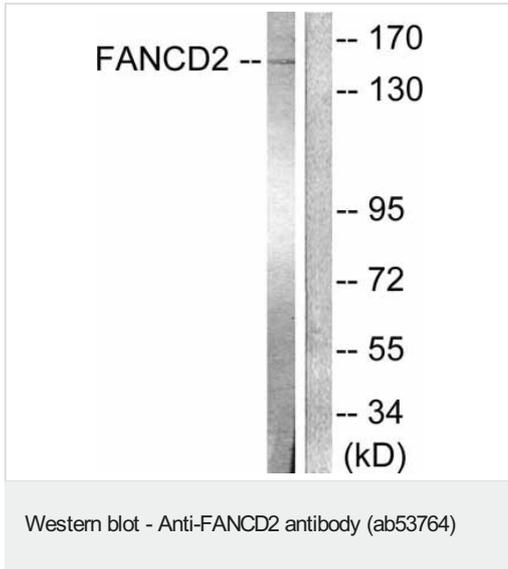
“应用说明”部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/500 - 1/1000. Detects a band of approximately 166 kDa (predicted molecular weight: 166 kDa).
ELISA		1/10000.

靶标

功能	Required for maintenance of chromosomal stability. Promotes accurate and efficient pairing of homologs during meiosis. Involved in the repair of DNA double-strand breaks, both by homologous recombination and single-strand annealing. May participate in S phase and G2 phase checkpoint activation upon DNA damage. Promotes BRCA2/FANCD1 loading onto damaged chromatin. May also be involved in B-cell immunoglobulin isotype switching.
组织特异性	Highly expressed in germinal center cells of the spleen, tonsil, and reactive lymph nodes, and in the proliferating basal layer of squamous epithelium of tonsil, esophagus, oropharynx, larynx and cervix. Expressed in cytotrophoblastic cells of the placenta and exocrine cells of the pancreas (at protein level). Highly expressed in testis, where expression is restricted to maturing spermatocytes.
疾病相关	Defects in FANCD2 are a cause of Fanconi anemia complementation group D type 2 (FANCD2) [MIM:227646]. It is 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.
发展阶段	Highly expressed in fetal oocytes, and in hematopoietic cells of the fetal liver and bone marrow (at protein level).
结构域	The C-terminal 24 residues of isoform 2 are required for its function.
翻译后修饰	Monoubiquitinated on Lys-561 during S phase and upon genotoxic stress (isoform 1 and isoform 2). Deubiquitinated by USP1 as cells enter G2/M, or once DNA repair is completed. Monoubiquitination requires the FANCA-FANCB-FANCC-FANCE-FANCF-FANCG-FANCM complex, RPA1 and ATR, and is mediated by FANCL/PHF9. Ubiquitination is required for binding to chromatin, interaction with BRCA1, BRCA2 and MTMR15/FAN1, DNA repair, and normal cell cycle progression, but not for phosphorylation on Ser-222 or interaction with MEN1. Phosphorylated in response to various genotoxic stresses by ATM and/or ATR. Upon ionizing radiation, phosphorylated by ATM on Ser-222 and Ser-1404. Phosphorylation on Ser-222 is required for S-phase checkpoint activation, but not for ubiquitination, foci formation, or DNA repair. In contrast, phosphorylation by ATR on other sites may be required for ubiquitination and foci formation.
细胞定位	Nucleus. Concentrates in nuclear foci during S phase and upon genotoxic stress.

图片



All lanes : Anti-FANCD2 antibody (ab53764) at 1/500 dilution

Lane 1 : HT29 cell extract, treated with Calyculin A (50ng/ml, 30mins)

Lane 2 : HT29 cell extract, treated with Calyculin A (50ng/ml, 30mins) with immunising peptide

Predicted band size: 166 kDa

Observed band size: 166 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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