

Product datasheet

Recombinant Human FANCI protein ab132153

[1 Image](#)

Description

Product name	Recombinant Human FANCI protein
Purity	>= 80 % Purified via GST Tag. Glutathione Sepharose
Expression system	Wheat germ
Accession	<u>Q9NVI1</u>
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MFKDVPLTAAEEVEFVVEKALSMFSKMNLQEIPPLVYQLLV LSSKGSRSKV LEGIAFFSALDKQHNEEQSGDE
Predicted molecular weight	34 kDa including tags
Amino acids	180 to 252
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab132153** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA SDS-PAGE Western blot
Form	Liquid

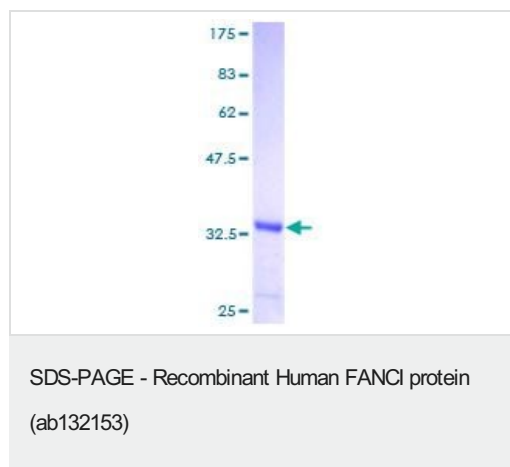
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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General Info

Function	Required for maintenance of chromosomal stability. Involved in the repair of DNA double-strand breaks by homologous recombination and in the repair of DNA cross-links. Participates in S phase and G2 phase checkpoint activation upon DNA damage. Promotes FANCD2 ubiquitination and recruitment to DNA repair sites.
Involvement in disease	Defects in FANCI are a cause of Fanconi anemia complementation group I (FANCI) [MIM:609053]. 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.
Domain	The C-terminal 30 residues are probably required for function in DNA repair.
Post-translational modifications	Monoubiquitinated on Lys-523 during S phase and upon genotoxic stress. 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. Ubiquitination is required for binding to chromatin, DNA repair, and normal cell cycle progression. Phosphorylated in response to DNA damage by ATM and/or ATR.
Cellular localization	Nucleus. Concentrates in nuclear foci upon genotoxic stress.

Images



SDS-PAGE analysis of ab132153 on a 12.5% gel stained with Coomassie Blue.

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

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