

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human FACA/FANCA in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse FANCA, recombinant human (rh) FANCD2, rhFANCE, rhFANCF, rhFANCG, and rhFANCI is observed.                                               |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human FACA/FANCA<br>Tyr35-Arg142<br>Accession # O15360                                                                                                                                                                                  |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

FACA (Fanconi anemia group A) is a 160-165 kDa protein that belongs to Fanconi anemia protein group I. FACA is widely expressed, activated by phosphorylation, partners with FANCG, and participates in the formation of an eight subunit Fanconi anemia core complex that ubiquitinates FANCD2 and FANCI. Ultimately, this contributes to the reactivation of stalled DNA repair replication forks. Human FACA is 1455 amino acids (aa) in length. It contains one NLS (aa 18-34) and four phosphorylation sites at Ser849, 850, 858 and 1449. There are four potential splice variants. One shows a premature truncation after Cys297, a second contains a six aa substitution for aa 297-1455, a third shows a deletion of aa 143-174 accompanied by truncation after Cys297, and a fourth exhibits an alternative start site at Met528, accompanied by a 35 aa substitution for aa 1390-1455. Over aa 35-142, human FACA shares 61% aa identity with mouse FACA.

## PRODUCT SPECIFIC NOTICES

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