

Anti-human FACA/FANCA Antibody

ORDERING INFORMATION

Catalog Number: AF6026

Lot Number: CDIV01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human FACA

Immunogen: *E. coli*-derived rhFACA (aa 35 - 142)

Ig Type: goat IgG

Applications: Western blot
Direct ELISA

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.

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human FACA (rhFACA; aa 35 - 142; Accession # O15360). Human FACA specific IgG was purified by human FACA affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

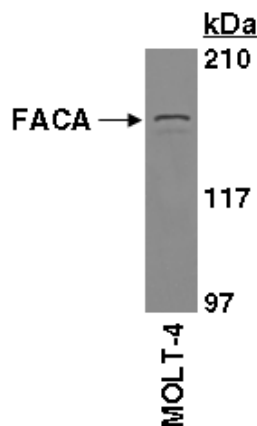
This antibody has been selected for its ability to recognize human FACA in direct ELISAs and Western blots. In direct ELISAs, this antibody shows less than 1% cross-reactivity with rmFANCA, rhFANCD2, rhFANCE, rhFANCF, rhFANCG and rhFANCI.

Applications

Western blot - An antibody concentration of 1.0 µg/mL is recommended.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human FACA. The detection limit for rhFACA is approximately 0.2 ng/well.

Optimal dilutions should be determined by each laboratory for each application.



Detection of FACA with AF6026.

Cell lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 µg/mL goat anti-hFACA.