Data Sheet (Cat.No.TMPY-02544)

TargetMol

FANCA Protein, Human, Recombinant (His)

General Information

Synonyms:	FA-H;FA1;FAA;FAH;FANCH;FACA;Fanconi anemia, complementation group A;FA
Protein Construction:	A DNA sequence encoding the human FANCA (AAH08979.1) (Met 1-Cys 297) was expressed, with a polyhistidine tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	AAH08979.1
Molecular Weight:	35.2 kDa (predicted); 35 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 75 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 200 mM NaCl, pH 8.5, 20% gly, 0.1% Triton, 1 mM TCEP. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

FANCA is one of the six known Fanconi anemia gene products (FANCA, FANCC, FANCD2, FANCE, FANCF, and FANCG proteins). Fanconi anemia (FA) is a genetic disorder predisposing to aplastic anemia and cancer characterized by hypersensitivity to DNA-damaging agents and oxidative stress. FANCA associates with the IκB kinase (IKK) signalsome via interaction with IKK2. Components of the FANCA complex undergo rapid, stimulus-dependent

changes in phosphorylation, which are blocked by kinase-inactive IKK2.

Reference

Otsuki T,et al.(2002) Fanconi anemia protein complex is a novel target of the IKK signalsome. J Cell Biochem. 86 (4): 613-23.
Taniguchi T,et al.(2002) The Fanconi anemia protein, FANCE, promotes the nuclear accumulation of FANCC. Blood. 100 (7): 2457-62.
Garcia-Higuera I,et al.(1999) Fanconi anemia proteins FANCA, FANCC, and FANCG / XRCC9 interact in a functional nuclear complex. Mol Cell Biol. 19 (7): 4866-73.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481