Anti-XPAantibody, monoclonal (5F12)

70-031 50μg, 70-032 250 μg

XP (Xeroderma pigmentosum) is an autosomal recessive human disease characterized by hypersensitivity to sunlight and a high incidence of skin cancer on sun-exposed skin (1). Cells from XP patients are hypersensitive to killing by UV irradiation beause of a defect in nucleotide excision repair (NER). XP is classified into seven complementation groups (A~G) and a variant form (1). XPA shows the most severe symptoms. Products encoded by the XP genes function in repairing UV-induced cyclobutane pyrimidine dimmer and (6-4) photoproducts as well as chemically induced variety of DNA lesions (1).

XPA protein consists of 273 amino acids and forms a complexe with many proteins such as RPA, ERCC1, TFIIH、XAB1, and XAB2, which play a role in early step of NER. The hybrydoma 5F12 was constructed by Pro. K. Tanaka' group who first cloned the XPA gene (2, 3) .

Applications

1. Western blotting (0.1~1 ug/ml) 2. ELISA 3. Inhibition of in vitro excision repair reaction.
4. Inhibition of XPA interaction with ERCC1 and TFIIH

Other applications were not tested

Antigen : Recombinant full-length human XPA protein

Cross reactivity: human (expected to react also with mouse XPA from the sequence homology)

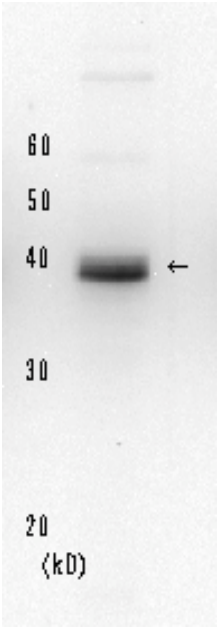
Epitope: Amino acids 30-47

Clone: Mouse monoclonal antibody, 5F12

Subtype: IgG2b

Form: Purified IgG , 1 mg/ml in PBS pH 7.2, 50% glycerol, filter-sterilyzed

Storage: -20℃ (long period; -70℃)



Reference: This antibody is described in Ref.2

1. Friedberg EC、DNA Repair and Mutagenesis.
2nd Ed. ASM Press (2006)
2.SaijoM et al, Biochem Biophys Res Comm 321:815 (2004)
3.Tanaka K et al. Nature 348:73 (1990)

Figure. Detection of XPA protein in crude extract of HeLa cell by western blotting, using the monoclonal antibody 5F12.

＜Distributed by ＞: SCETI K.K. DF Kasumigaseki Place, 3-6-7 Kasumigaseki, Chiyoda-ku Tokyo 100-0013 JAPAN
Tel: +81-3-5510-2347 Fax: +81-3-5510-0134
E-mail: exp-pet@sceti.co.jp URL: www.sceti.co.jp/export/
＜Manufactured by＞ : BioAcademia,Inc. 7-7-18 Saito-Asagi, Ibaraki, Osaka 567-0085, JAPAN