

C17ORF53 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2275a

Specification

C170RF53 Antibody - Product Information

E, WB, IF, FC Application **Primary Accession 08N3I3** Reactivity Human Host Mouse Clonality **Monoclonal** Isotype laG2b

Calculated MW 69.8kDa KDa

Description

C17orf53 (chromosome 17 open reading frame 53) is a 647 amino acid protein that is encoded by a gene mapping to human chromosome 17. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes. Chromosome 17 is also linked to neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

Immunogen

Purified recombinant fragment of human C17ORF53 (AA: 282-527) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

C17ORF53 Antibody - Additional Information

Gene ID 78995

Other Names

Uncharacterized protein C17orf53, C17orf53

Dilution

E~~1/10000 WB~~1/500 - 1/2000 IF~~1/50 FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



Precautions

C17ORF53 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

C17ORF53 Antibody - Protein Information

Name HROB (HGNC:28460)

Synonyms C17orf53

Function

DNA-binding protein involved in homologous recombination that acts by recruiting the MCM8-MCM9 helicase complex to sites of DNA damage to promote DNA repair synthesis.

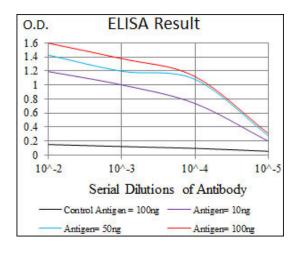
Cellular Location

Nucleus. Chromosome. Note=Localized to the sites of DNA damage.

C17ORF53 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture





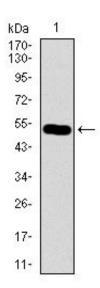


Figure 1: Western blot analysis using C17ORF53 mAb against human C17ORF53 recombinant protein. (Expected MW is 51.9 kDa)

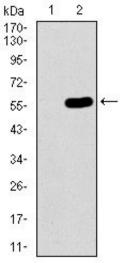


Figure 2: Western blot analysis using C17ORF53 mAb against HEK293 (1) and C17ORF53 (AA: 282-527)-hlgGFc transfected HEK293 (2) cell lysate.

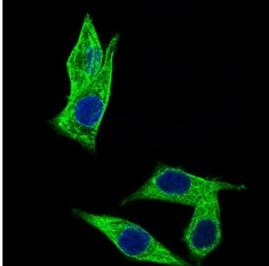


Figure 3: Immunofluorescence analysis of HepG2 cells using C17ORF53 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



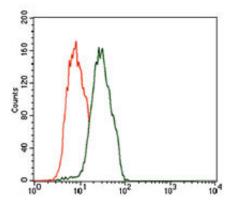


Figure 4: Flow cytometric analysis of Jurkat cells using C170RF53 mouse mAb (green) and negative control (red).

C17ORF53 Antibody - References

1.Nat Genet. 2009 Jan;41(1):15-7.