

# **Product datasheet for CF502002**

#### OriGene Technologies, Inc.

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### XLF (NHEJ1) Mouse Monoclonal Antibody [Clone ID: OTI3B5]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3B5

Applications: FC, IF, WB

**Recommended Dilution:** WB 1:500~2000, IF 1:100, FLOW 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human NHEJ1 (NP\_079058) produced in HEK293T

cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 33.2 kDa

**Gene Name:** non-homologous end joining factor 1

Database Link: NP 079058

Entrez Gene 79840 Human

Q9H9Q4





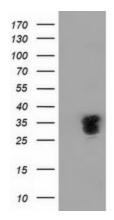
Background:

Double-strand breaks in DNA result from genotoxic stresses and are among the most damaging of DNA lesions. This gene encodes a DNA repair factor essential for the nonhomologous end-joining pathway, which preferentially mediates repair of double-stranded breaks. Mutations in this gene cause different kinds of severe combined immunodeficiency disorders. [provided by RefSeq]

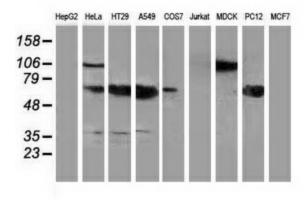
Synonyms: XLF

Protein Pathways: Non-homologous end-joining

## **Product images:**

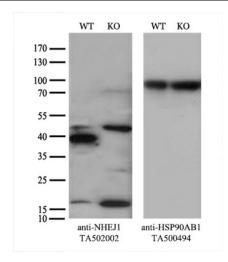


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY NHEJ1 ([RC203393], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NHEJ1. Positive lysates [LY403031] (100ug) and [LC403031] (20ug) can be purchased separately from OriGene.

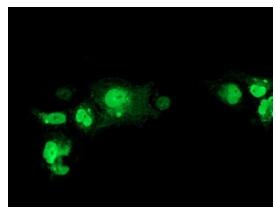


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-NHEJ1 monoclonal antibody.

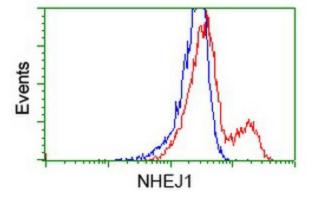




Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and NHEJ1-Knockout HeLa cells (KO, Cat# [LC831412]) were separated by SDS-PAGE and immunoblotted with anti-NHEJ1 monoclonal antibody [TA502002] (1:100). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.

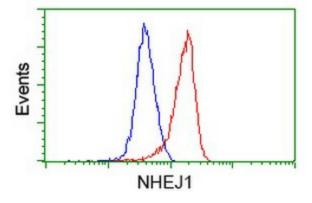


Anti-NHEJ1 mouse monoclonal antibody ([TA502002]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY NHEJ1 ([RC203393]).

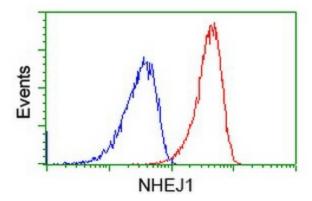


HEK293T cells transfected with either [RC203393] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-NHEJ1 antibody ([TA502002]), and then analyzed by flow cytometry.





Flow cytometric Analysis of Hela cells, using anti-NHEJ1 antibody ([TA502002]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-NHEJ1 antibody ([TA502002]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).