

## OriGene Technologies, Inc.

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## **Product datasheet for TA502002**

## 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:** PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.71 mg/ml

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

(protein A/G)

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

**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]

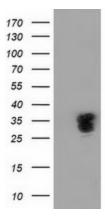
Synonyms: XLF

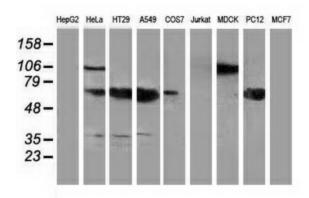
**Protein Pathways:** Non-homologous end-joining

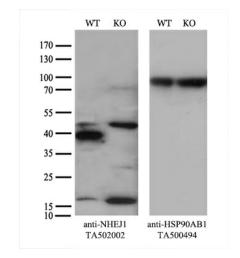




## **Product images:**





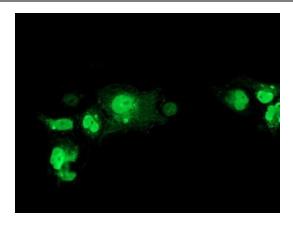


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY NHEJ1 ([RC203393], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NHEJ1. Positive lysates [LY403031] (100ug) and [LC403031]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

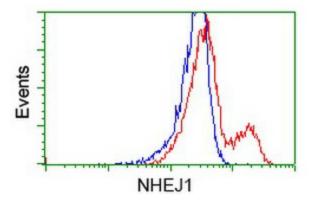
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-NHEJ1 monoclonal antibody.

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.

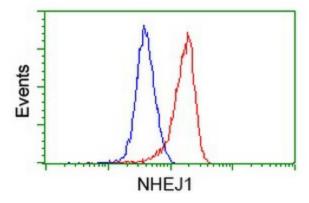




Anti-NHEJ1 mouse monoclonal antibody (TA502002) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY NHEJ1 ([RC203393]).

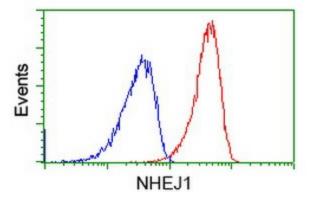


HEK293T cells transfected with either [RC203393] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-NHEJ1 antibody (TA502002), and then analyzed by flow cytometry.



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).