

## Product datasheet for **CF502004**

### **XLF (NHEJ1) Mouse Monoclonal Antibody [Clone ID: OTI3E6]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI3E6
<b>Applications:</b>	FC, IF, IHC, WB
<b>Recommended Dilution:</b>	WB 1:500~2000, IHC 1:150, IF 1:100, FLOW 1:100
<b>Reactivity:</b>	Human
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human NHEJ1 (NP_079058) produced in HEK293T cell.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	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)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	33.2 kDa
<b>Gene Name:</b>	non-homologous end joining factor 1
<b>Database Link:</b>	<a href="#">NP_079058</a> <a href="#">Entrez Gene 79840 Human</a> <a href="#">Q9H9Q4</a>



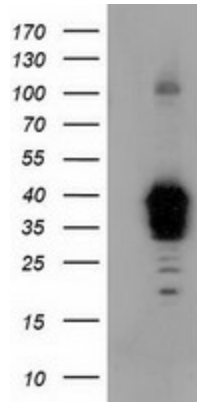
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**Background:** Double-strand breaks in DNA result from genotoxic stresses and are among the most damaging of DNA lesions. This gene encodes a DNA repair factor essential for the nonhomologous end-joining pathway, which preferentially mediates repair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

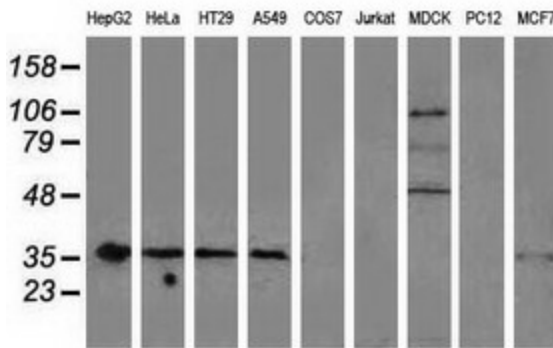
**Synonyms:** XLF

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

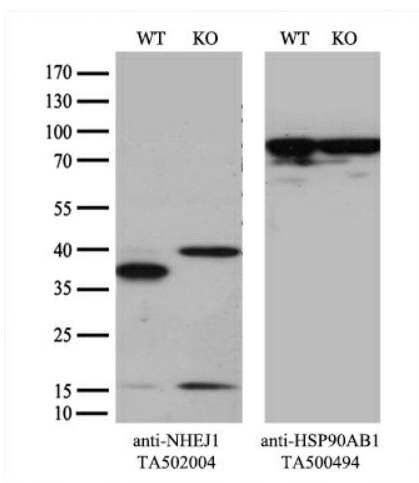
**Product images:**



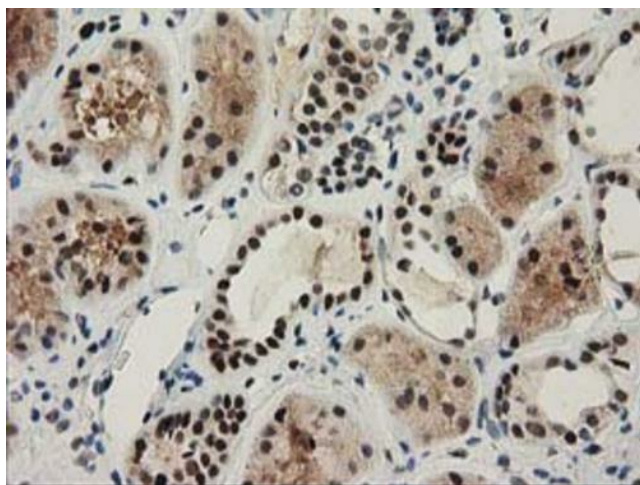
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY NHEJ1 ([RC203393], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NHEJ1. Positive lysates [LY403031] (100ug) and [LC403031]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



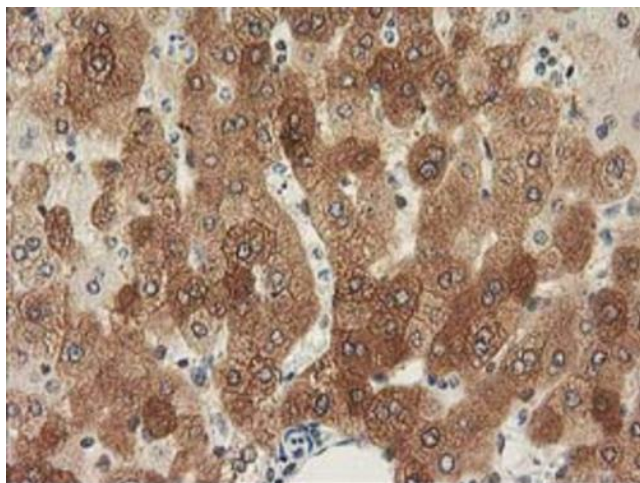
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-NHEJ1 monoclonal antibody.



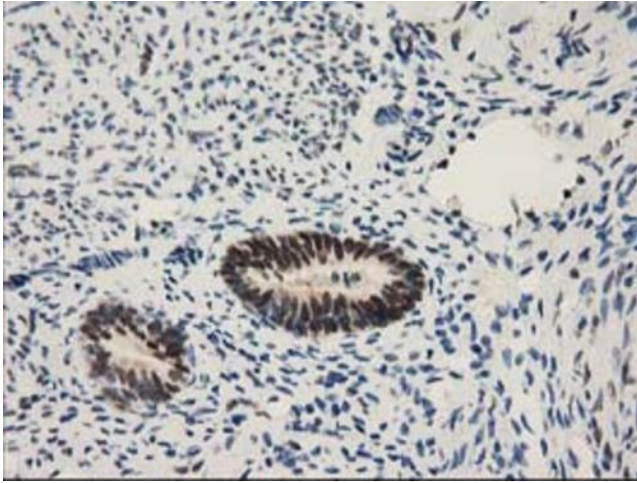
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and NHEJ1-Knockout HeLa cells (KO, Cat#[LC831412]) were separated by SDS-PAGE and immunoblotted with anti-NHEJ1 monoclonal antibody [TA502004] (1:200). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.



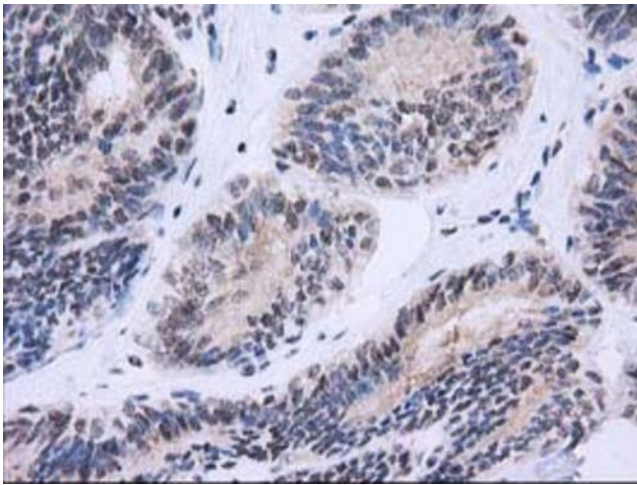
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-NHEJ1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



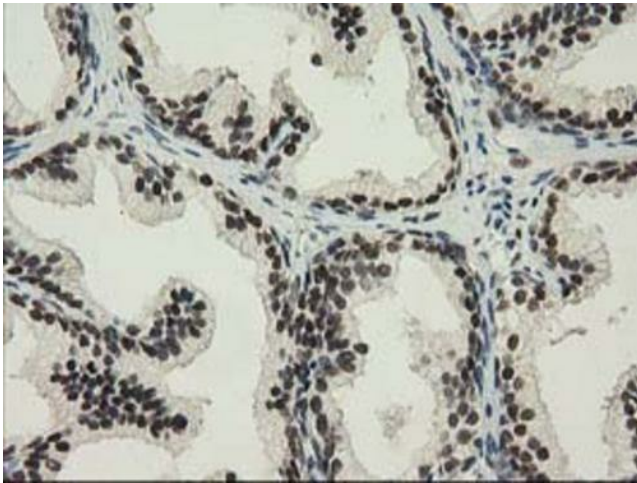
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-NHEJ1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human endometrium tissue within the normal limits using anti-NHEJ1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

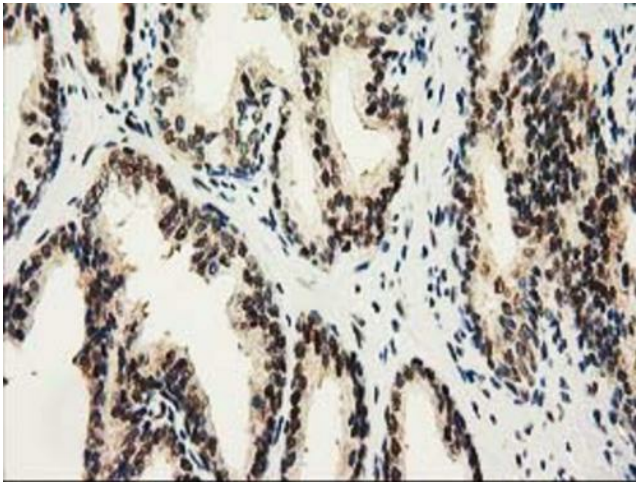


Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-NHEJ1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

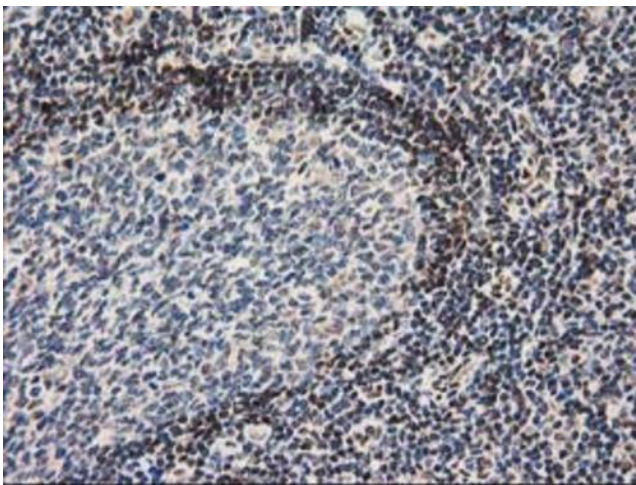


Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-NHEJ1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.





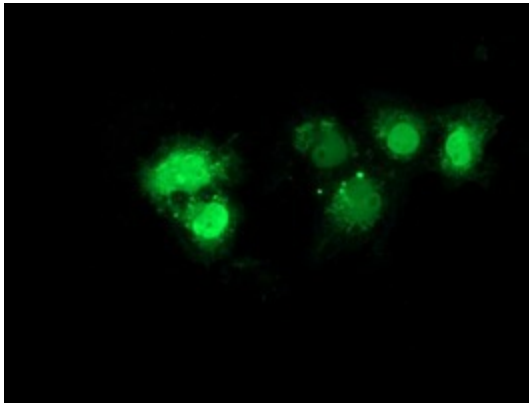
Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-NHEJ1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



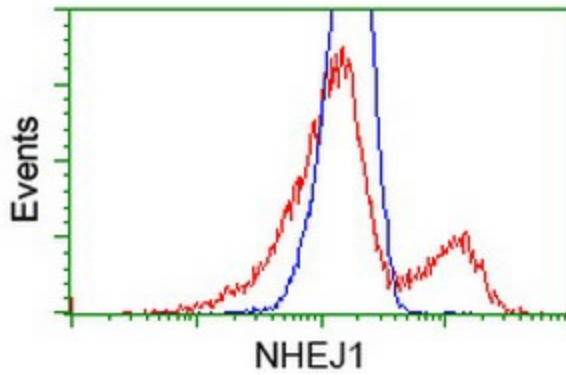
Immunohistochemical staining of paraffin-embedded Human lymph node tissue within the normal limits using anti-NHEJ1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



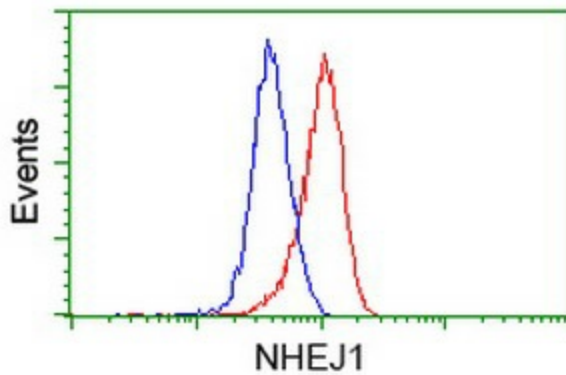
Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-NHEJ1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-NHEJ1 mouse monoclonal antibody ([TA502004]) 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 ([TA502004]), and then analyzed by flow cytometry.



Flow cytometric Analysis of HeLa cells, using anti-NHEJ1 antibody ([TA502004]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).