

## 32-4316: Recombinant Human Nonhomologous End-Joining Factor 1

**Alternative Name :** Nonhomologous end-joining factor 1, Protein cernunnos, XRCC4-like factor, Cernunnos, XLF, FLJ12610.

### Description

Source : E.coli. NHEJ1 Human Recombinant produced in E. coli is a single polypeptide chain containing 247 amino acids (1-224) and having a molecular mass of 27.8 kDa. NHEJ1 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Non-homologous end-joining factor 1 (NHEJ1) is a member of the XLF family. NHEJ1 is a DNA repair factor vital for the nonhomologous end-joining pathway, which preferentially mediates repair of double-stranded breaks. NHEJ1 gene mutations cause different kinds of severe combined immunodeficiency disorders. NHEJ1 was initially detected as the protein mutated in five patients with growth retardation, microcephaly, and immunodeficiency. In addition, patients with NHEJ1 mutations have immunodeficiency caused by a defect in V(D)J recombination, which employs NHEJ to promote immune system diversity.

### Product Info

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| <b>Amount :</b>            | 10 µg  |
| <b>Purification :</b>      | Greater than 90% as determined by SDS-PAGE.  |
| <b>Content :</b>           | The NHEJ1 solution (0.5mg/1ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.1M NaCl, 1mM DTT and 20% glycerol.  |
| <b>Storage condition :</b> | Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.   |
| <b>Amino Acid :</b>        | MGSSHHHHHH SGLVPRGSH MGS MEELEQG LLMQPWAWLQ LAENSLAKV FITKQGYALL<br>VSDLQQVWHE QVDTSVVSQR AKELNKRLTA PPAFLCHLD NLLRPLLKDA AHPSEATFSC DCVADALILR<br>VRSELSGLPF YWNFHCMLAS PSLVSQHLIR PLMGMSLALQ CQVRELATLL HMKDLEIQDY QESGATLIRD<br>RLKTEPFEEN SFLEQFMIEK LPEACSIGDG KPFVMNLQDL YMAVTTQ |

