

# YEp195-CUP1-His-Ubi Plasmid

**Catalogue number:** 153607

**Sub-type:** YEplac195

**Images:**

## Contributor

**Inventor:**

**Institute:** Cancer Research UK London Research Institute: Clare Hall Laboratories

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** YEp195-CUP1-His-Ubi Plasmid

**Alternate name:** UBI3(1-76)

**Class:**

**Conjugate:**

**Description:** Yeast episomal vector for expression of His-tagged ubiquitin. Ubiquitin exists either covalently attached to another protein, or free (unanchored). When covalently bound, it is conjugated to target proteins via an isopeptide bond either as a monomer (monoubiquitin), a polymer linked via different Lys residues of the ubiquitin (polyubiquitin chains) or a linear polymer linked via the initiator Met of the ubiquitin (linear polyubiquitin chains). Polyubiquitin chains, when attached to a target protein, have different functions depending on the Lys residue of the ubiquitin that is linked: Lys-6-linked may be involved in DNA repair; Lys-11-linked is involved in ERAD (endoplasmic reticulum-associated degradation) and in cell-cycle regulation; Lys-29-linked is involved in lysosomal degradation; Lys-33-linked is involved in kinase modification; Lys-48-linked is involved in protein degradation via the proteasome; Lys-63-linked is involved in endocytosis, and DNA-damage responses. Linear polymer chains formed via attachment by the initiator Met lead to cell signaling. Ubiquitin is usually conjugated to Lys residues of target proteins, however, in rare cases, conjugation to Cys or Ser residues has been observed. When polyubiquitin is free (unanchored-polyubiquitin), it also has distinct roles, such as in activation of protein kinases, and in signaling (By similarity).

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:**

**Gender:**

**Isotype:**

**Reactivity:**

**Selectivity:**

**Host:**

**Immunogen:**

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:**

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:** URA3

**Additional notes:** Yeast episomal vector for expression of His-tagged ubiquitin. Ubiquitin exists either covalently attached to another protein, or free (unanchored). When covalently bound, it is conjugated to target proteins via an isopeptide bond either as a monomer (monoubiquitin), a polymer linked via different Lys residues of the ubiquitin (polyubiquitin chains) or a linear polymer linked via the initiator Met of the ubiquitin (linear polyubiquitin chains). Polyubiquitin chains, when attached to a target protein, have different functions depending on the Lys residue of the ubiquitin that is linked: Lys-6-linked may be involved in DNA repair; Lys-11-linked is involved in ERAD (endoplasmic reticulum-associated degradation) and in cell-cycle regulation; Lys-29-linked is involved in lysosomal degradation; Lys-33-linked is involved in kinase modification; Lys-48-linked is involved in protein degradation via the proteasome; Lys-63-linked is involved in endocytosis, and DNA-damage responses. Linear polymer chains formed via attachment by the initiator Met lead to cell signaling. Ubiquitin is usually conjugated to Lys residues of target proteins, however, in rare cases, conjugation to Cys or Ser residues has been observed. When polyubiquitin is free (unanchored-polyubiquitin), it also has distinct roles, such as in activation of protein kinases, and in signaling (By similarity).

## Target details

**Target:** Ubiquitin

**Target alternate names:**

**Target background:**

**Molecular weight:**

**Ic50:**

## Applications

**Application:**

**Application notes:**

## Handling

**Format:**  
**Concentration:**  
**Passage number:**  
**Growth medium:**  
**Temperature:**  
**Atmosphere:**  
**Volume:**  
**Storage medium:**  
**Storage buffer:**  
**Storage conditions:**  
**Shipping conditions:**

## Related tools

**Related tools:** YEp181-CUP1-His-Ubi Plasmid

## References

**References:** Etheridge et al. 2008. PLoS Genet. 4(11):e1000259. PMID: 19008950. ; Hamblet et al. 2002. Development. 129(24):5827-38. PMID: 12421720. ; Song et al. 2000. J Biol Chem. 275(31):23790-7. PMID: 10806215. ; Yang et al. 1996. Gene. 180(1-2):121-3. PMID: 8973355. ; Tsang et al. 1996. Dev Dyn. 207(3):253-62. PMID: 8922524.