## **Human Recombinant Ubiquitin-K6**

**CATALOG #**: 6395-500 500 μg

6395-1000 1 mg

**ALTERNATE NAMES:** UBB, Ribosomal Protein S27a, CEP80, UBA80,

UBCEP1, UBCEP80, HUBCEP80, RPS27A.

SOURCE: E.Coli

**PURITY**: ≥ 95% by RP-HPLC and SDS - PAGE

MOL. WEIGHT: 8.732 kDa

**FORMULATION:** 4 mg/ml in PBS.

**SOLUBILITY**: >30 mg/ml

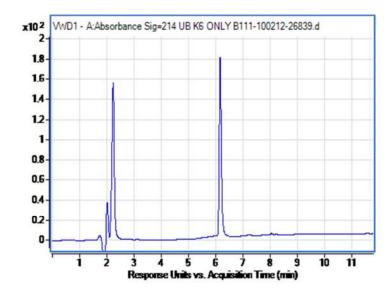
STORAGE CONDITIONS: Aliquot and store at -80°C. Avoid repeated freezing

and thawing cycles.

**DESCRIPTION**: Ubiquitin is a small polypeptide that can be conjugated via its C-terminus to amine groups of lysine residue on target proteins. This conjunction is referred to as monoubiquitylation. Additional ubiquitin moieties can be subsequently conjugated to this initial ubiquitin, utilizing any one of the seven lysine residues on the surface of ubiquitin. The formation of these ubiquitin chains is referred to as polyubiquitylation. This tag-free recombinant form of human ubiquitin is engineered to have all available lysines mutated to arginines, except at position 6. This molecule, therefore, can only form polyubiquitin chains of K6 linkage type. Covalent attachment of ubiquitin to other proteins serves various functions, but its major role is to target cellular proteins for destruction. Cellular components that activate, transfer, remove, or simply recognize ubiquitin number in the hundreds, perhaps even in the thousands. In light of this complexity the ubiquitin pathway is ideal for a systems biology approach. Ubiquitin plays a very important role in regulated non-lysosomal ATP dependent protein degradation. The Ub-proteasome proteolytic pathway, which is a complex process, is implicated to be of great importance for regulating numerous cellular processes.

## **APPLICATIONS:**

- Characterization of proteins responsible for ubiquitin conjugation or removal.
- Ligand binding studies with ubiquitin related proteins.
- Characterization of linkage type for target protein.
- Profiling of E2/E3 interactions.
- Characterization of E3 polyubiquitylation activity.



RP-HPLC of Human Recombinant Ubiquitin-K6

## **RELATED PRODUCTS:**

- Ubiquitin, human recombinant (Cat. No. 4841-100, 1000)
- Human recombinant Ubiquitin WT (Cat. No. 6394-500, 1000)
- Human recombinant Ubiquitin K11 (Cat. No. 6396-500, 1000)
- Human recombinant Ubiquitin K27 (Cat. No. 6397-500, 1000)
- Human recombinant Ubiquitin K29 (Cat. No. 6398-500, 1000)
- Human recombinant Ubiquitin K33 (Cat. No. 6399-500, 1000)
- Human recombinant Ubiquitin K48 (Cat. No. 6400-500, 1000)
  Human recombinant Ubiquitin K63 (Cat. No. 6401-500, 1000)
- Human recombinant Ubiquitin K0 (Cat. No. 6402-500, 1000)
- Human recombinant Ubiquitin K6R (Cat. No. 6403-500, 1000)
- Human recombinant Ubiquitin K11R (Cat. No. 6404-500, 1000)
- Human recombinant Ubiquitin K27R (Cat. No. 6405-500, 1000)
- Human recombinant Ubiquitin K29R (Cat. No. 6406-500, 1000)
- Human recombinant Ubiquitin K33R (Cat. No. 6407-500, 1000)
- Human recombinant Ubiquitin K48R (Cat. No. 6408-500, 1000)
- Human recombinant Ubiquitin K63R (Cat. No. 6409-500, 1000)
- Human recombinant Ubiquitin K48R K63R (Cat. No. 6410-500, 1000)
- Ubiquitin-AMC (Cat. No. 4842-25)
- Ubiquitin Aldehyde (Cat. No. 4845-50)

FOR RESEARCH LISE ONLY! Not to be used in humans