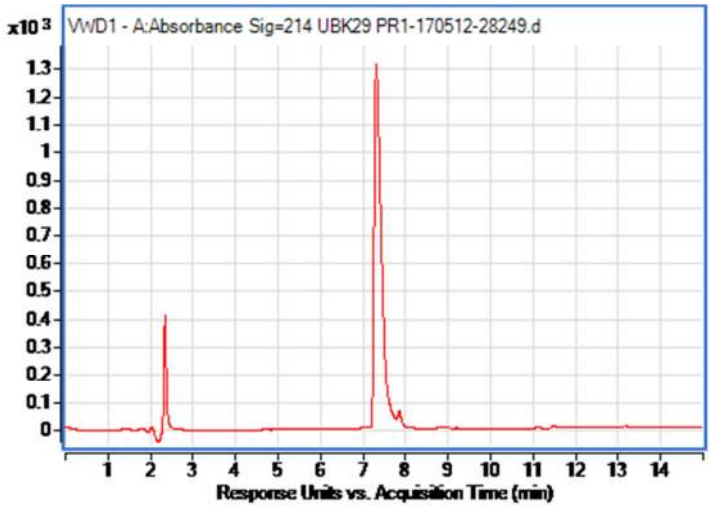
Human Recombinant Ubiquitin-K29

CATALOG #:	6398-500	500 µg
	6398-1000	1 mg
ALTERNATE NAMES:	UBB, Ribosomal Protein S27a, CEP80, UBA80, UBCEP1, UBCEP80, HUBCEP80, RPS27A.	
SOURCE:	E.Coli	
PURITY:	≥ 95% by RP-HPLC	
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 29. This molecule, therefore, can only form polyubiquitin chains of K29 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-K29

RELATED PRODUCTS:

- Ubiquitin, human recombinant **(Cat. No. 4841-100, 1000)**
- Human recombinant Ubiquitin – WT **(Cat. No. 6394-500, 1000)**
- Human recombinant Ubiquitin – K6 **(Cat. No. 6395-500, 1000)**
- Human recombinant Ubiquitin – K27 **(Cat. No. 6397-500, 1000)**
- Human recombinant Ubiquitin – K11 **(Cat. No. 6396-500, 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 USE ONLY. Not to be used in humans