

Human recombinant protein Ubiquitin-K48 Human Recombinant Ubiquitin-K48 Catalog # PBV10636r

Specification

Human recombinant protein Ubiquitin-K48 - Product info

Primary Accession	<u>P62979</u>
Concentration	4
Calculated MW	8.732 kDa KDa

Human recombinant protein Ubiquitin-K48 - Additional Info

Gene ID	6233
Gene Symbol	RPS27A
Gene Source	Human
Source	E. Coli
Assay&Purity	RP-HPLC; ≥95%
Assay2&Purity2	N/A;
Recombinant	Yes
Format	
Liquid	

Storage

-80°C; 4 mg/ml in 50 mM Tris, pH 7.5, 150 mM NaCl, 10% glycerol.

Human recombinant protein Ubiquitin-K48 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Human recombinant protein Ubiquitin-K48 - Images

Human recombinant protein Ubiquitin-K48 - Background

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 48. This molecule, therefore, can only form polyubiquitin chains of K48 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.

Human recombinant protein Ubiquitin-K48 - References

Pancre V., et al.Eur. J. Immunol. 21:2735-2741(1991). Adams S.M., et al.Br. J. Cancer 65:65-71(1992). Hillier L.W., et al.Nature 434:724-731(2005). Vladimirov S.N., et al.Eur. J. Biochem. 239:144-149(1996). Schlesinger D.H., et al.Nature 255:423-424(1975).