

Ubiquitin-Rhodamine recombinant protein

Ubiquitin-Rhodamine Catalog # PBV10644r

Specification

Ubiquitin-Rhodamine recombinant protein - Product info

Calculated MW 8.934 kDa KDa

Ubiquitin-Rhodamine recombinant protein - Additional Info

Assay&Purity
Assay2&Purity2
Application Notes
Aqueous buffers, DMSO

RP-HPLC; ≥95% N/A;

Format Lyophilized powder

Storage

-80°C; Lyophilized powder

Ubiquitin-Rhodamine recombinant protein - Protocols

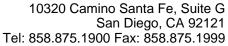
Provided below are standard protocols that you may find useful for product applications.

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

Ubiquitin-Rhodamine recombinant protein - Images

Ubiquitin-Rhodamine recombinant protein - Background

Ubiquitin-rhodamine 110 is a quenched, fluorescent substrate for deubiquitylases, especially ubiquitin C-terminal hydrolases. Cleavage of the amide bond between the C-terminal glycine of ubiquitin and rhodamine results in an increase in rhodamine fluorescence at 535 nm (Exc. 485 nm). 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. 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.