

UIM-UBA Fusion Protein

03/14

Store at 4°C. Do not freeze.

 Cat. No.: 6571-250 250 µl (100 µg) UIM-UBA protein (0.4 mg/ml) in PBS with 0.1% Azide

Salient Features:

Source: E.Coli.
 Purity: ≥95% by SDS-PAGE analysis.
 Molecular weight: ~13.3 kDa.
 Formulation: 250 µl of 0.4 mg/ml in PBS containing 0.1% azide.

Description:

Ubiquitin is a highly conserved 76-amino acid protein. It can be conjugated via its C-terminus to the amine groups of lysine residues 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. Different types of polyubiquitin chains can form, depending on the internal lysine residue used for this conjugation. These polyubiquitin chains further can attach to proteins post-translationally and aid in numerous downstream activities like proteasome-mediated proteolysis, autophagy, DNA damage tolerance, inflammation, apoptosis, signal transduction etc. Several classes of Ubiquitin interacting proteins help in mediating these downstream effects. Ubiquitin Interacting Motifs (UIM) and Ubiquitin Associated Domains (UBA) are two large classes of such protein domains which strongly interact with polyubiquitin chains.

We have developed an UIM-UBA chimeric protein from the UIM and UBA domains. Both these proteins are well-characterized for their high-affinity interaction with different types of polyubiquitin chains, but not with monomeric ubiquitin.

Applications:

- As negative control for biotin UIM-UBA in detecting polyubiquitinated proteins in cell lysate/tissue homogenate using **Dot blot**.

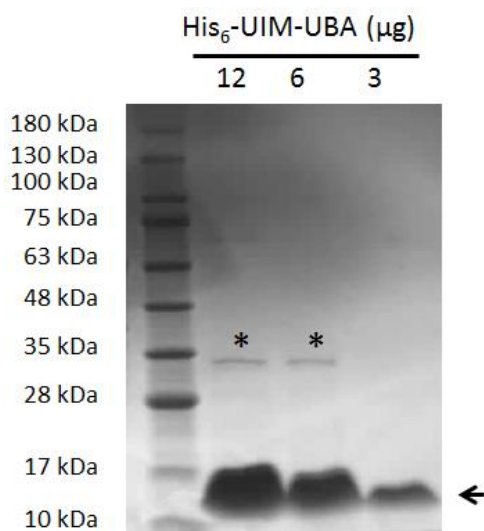


Figure 1. Purified His₆-UIM-UBA protein (12, 6, or 3 µg) was resolved in 4-20% SDS-PAGE gel, followed by Coomassie staining. Arrow head for His₆-UIM-UBA proteins, and stars (*) for bands which are likely derived from the dimerization of the protein.

RELATED PRODUCTS:

EZ Extract™ Polyubiquitin Buffer Kit (K6570-30)
 Ready-to-Use Ni-IDA Spin Purification Kit (K6567-25)
 Hi-Bind™ Ni QR Agarose Beads (6562)
 Benzonase Nuclease (Cat. #7680)
 10K Spin Column (1997)
 Ready-to-use Ni QR Agarose Beads Buffer Kit (K6563-3)
 Protein G-Sepharose Column (6518)
 Protein A/G-Sepharose Column (6528)
 Multipurpose Mini Spin Columns (6572-50)

EZEnrich™ Polyubiquitin Beads (6568-100)
 Streptavidin-Sepharose Beads (6565-2, -5, -10)
 Ready-to-use Ni QR Agarose Beads Buffer Kit (6563-3)
 EZ-Desalt™ Spin Desalting Columns (6564-25)
 Glutathione Sepharose (6555)
 Protein A-Sepharose Column (6508)
 Protein L-Sepharose Column (6538)
 Protein A/G/L-Sepharose Column (6548)

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