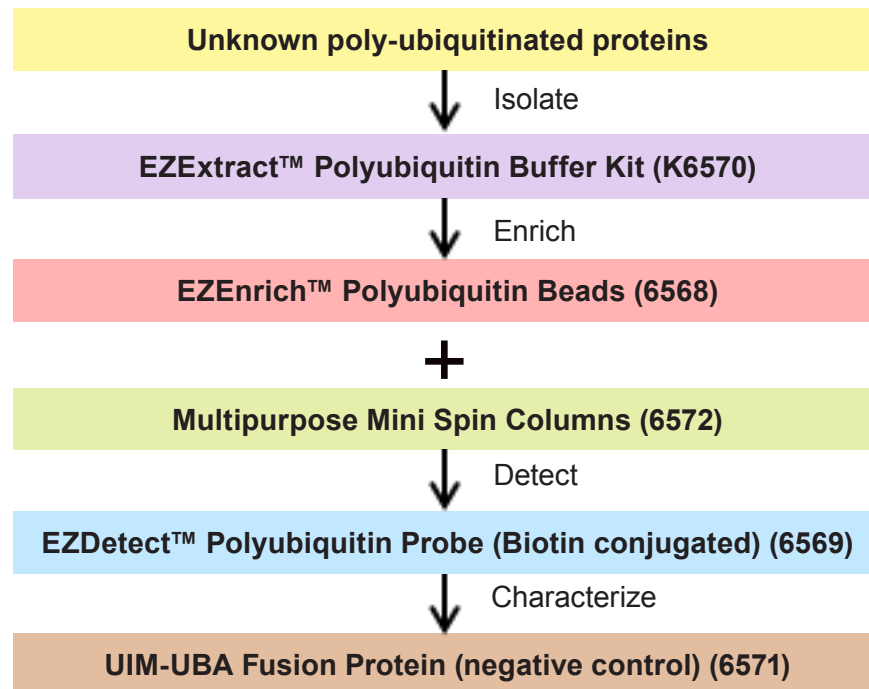


# Polyubiquitinated Proteins Extraction/Enrichment/Detection

Post-translational modification of proteins with ubiquitin is one of the most important mechanisms in the regulation of protein stability and function. This protein modification serves not only as a signal for its proteolytic degradation by the 26S proteasome, but also plays an important role in the regulation of many biological processes like autophagy, DNA damage tolerance, inflammation, apoptosis, signal transduction etc. In order to understand these processes in greater detail there is a requirement for techniques that can purify mixtures of ubiquitin-conjugated proteins, as a prerequisite to their identification and characterization. BioVision has developed multiple tools for efficient extraction, enrichment and detection of these poly-ubiquitinated proteins. These tools are easy to use, inexpensive and give reproducible results.

Cat No.	Product Name	Components
6568	EZEnrich™ Polyubiquitin Beads	300 µl of the slurry of beads
6569	EZDetect™ Polyubiquitin Probe (Biotin conjugated)	250 µl (100 µg) of Biotin-UIM-UBA protein (0.4 mg/ml) in PBS with 0.1% Azide
K6570	EZExtract™ Polyubiquitin Buffer Kit	Extraction Buffer, Protease Inhibitors and NEM
6571	UIM-UBA Fusion Protein	250 µl (100 µg) UIM-UBA protein (0.4 mg/ml) in PBS with 0.1% Azide
6572	Multipurpose Mini Spin Columns	50 Mini Spin Columns



# Key Features and Applications

## **EZEnrich™ Polyubiquitin Beads (6568)**

- Facilitates quick enrichment of proteins containing at least 4 ubiquitin sub-units.
- Use with complex samples like tissue homogenates, whole cell lysates, subcellular organelles like mitochondria, endoplasmic reticulum, etc.
- Harvested samples applicable on multiple downstream applications like proteomic studies, protein ubiquitination status tests etc.
- Use for recovery of poly-ubiquitinated proteins from in vitro ubiquitination reactions.
- Use for subjective quantitation of the differences in the ubiquitination of different target proteins.

## **EZExtract™ Polyubiquitin Buffer Kit (K6570)**

- Facilitates efficient extraction of polyubiquitinated proteins from cells while preserving the ubiquitination state of protein samples.
- Use also as a general lysis buffer for a broad range of applications, including Western blot, ELISA, dot blot, enzymatic assays, etc.
- Harvested samples compatible with numerous downstream applications including mass spectrometry.

## **EZDetect™ Polyubiquitin Probe (Biotin conjugated) (6569)**

- Facilitates detection of poly-ubiquitinated proteins by decreasing the interference from free monomeric ubiquitin which is highly abundant in biological samples.
- Use with Western Blot, Dot Blot, Immunohistochemistry, Immunocytochemistry etc.

## **UIM-UBA Fusion Protein (negative control) (6571)**

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

## **Multipurpose Mini Spin Columns (6572)**

- Use for immunoprecipitation and co-immunoprecipitation with protein A/G beads (Cat # 6501, 6503, 6511, 6513, 6520, etc).
- Use for antibody purification using protein A, G, L beads (Cat # 6501, 6503, 6511, 6513, 6520, 6531, 6541, etc).
- Use for affinity protein purification with beads like the EZEnrich™ Polyubiquitin Beads (Cat # 6568).
- Use for protein/DNA desalting using Sephadex G25 or Sephadex G50.
- Use for recombinant protein affinity purification of proteins with polyhistidine tag, GST tag, etc.