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Catalogue# RPCA-Ubi: Rabbit Polyclonal Antibody to Ubiquitin

Ubiquitin: Ubiquitin is a highly conserved globular 76 amino acid protein of about 8.5 kDa molecular weight. It has an important role in the targeting of proteins for proteolytic degradation. Proteins to be degraded are covalently coupled to the C-terminus of ubiquitin by means of ubiquitin ligases. The ubiquitin itself is frequently also ubiquitinated, producing a polyubiquitin chain. The polyubiquitinated complex is then recognized by a complex of degradative enzymes which together form the proteasome. Interestingly, ubiquitin also becomes covalently bonded to many types of pathological inclusions seen in serious human disease states which appear to be resistant to normal degradation, so that ubiquitin antibodies are very useful for studies of these inclusions. For example the neurofibrillary tangles and paired helical filaments diagnostic of Alzheimer's disease, the Lewy bodies seen in Parkinson's disease, and Pick bodies found in Pick's disease are all heavily ubiquitinated and can all be readily visualized with ubiquitin antibodies of appropriate specificity. Ubiquitin antibodies have become very widely used for such studies. The [HGNC](#) name for this protein is [UBB](#), [UBC](#).

Antibody Characteristics: Antibody was raised in rabbit against pure ubiquitin cross-linked with glutaraldehyde. Store at 4°C or -20°C. Avoid repeat freezing and thawing.

Suggestions for use: For immunofluorescence try RPCA-Ubi at dilutions of 1:500 to 1:1,000. Antibody is particularly effective in the visualization of ubiquitinated inclusion bodies as are seen in Alzheimer's and other neuropathologies. For paraffin embedded specimens using HRP conjugated secondaries try at 1:1,000 to 1:2,000. For western blotting try RPCA-Ubi at 1:5,000 to 1:10,000.

References:

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Limitations: This product is for research use only and is not approved for use in humans or in clinical diagnosis.

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