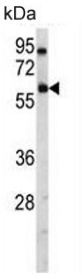
# USP14 Antibody (F54397)

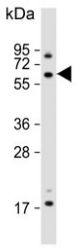
| Catalog No. | Formulation | Size |
|---|---|---|
| F54397-0.4ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.4 ml |
| F54397-0.08ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.08 ml |

**Bulk quote request**

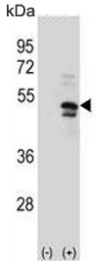
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Purity** | SAS precipitation |
| **UniProt** | P54578 |
| **Localization** | Cytoplasmic |
| **Applications** | Western blot: 1:500-1:2000<br>Immunohistochemistry (FFPE): 1:25 |
| **Limitations** | This USP14 antibody is available for research use only. |



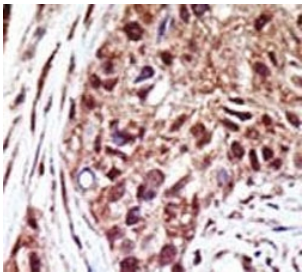

Western blot testing of human A2058 cell lysate with USP14 antibody. Predicted molecular weight ~56 kDa.




Western blot testing of human HCT-116 cell lysate with USP14 antibody. Predicted molecular weight ~56 kDa.




Western blot testing of 1) non-transfected and 2) transfected 293 cell lysate with USP14 antibody.



IHC testing of FFPE human cancer tissue with USP14 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.

## Description

Modification of target proteins by ubiquitin participates in a wide array of biological functions. Proteins destined for degradation or processing via the 26 S proteasome are coupled to multiple copies of ubiquitin. However, attachment of ubiquitin or ubiquitin-related molecules may also result in changes in subcellular distribution or modification of protein activity. An additional level of ubiquitin regulation, deubiquitination, is catalyzed by proteases called deubiquitinating enzymes, which fall into four distinct families. Ubiquitin C-terminal hydrolases, ubiquitin-specific processing proteases (USPs),1 OTU-domain ubiquitin-aldehyde-binding proteins, and Jab1/Pad1/MPN-domain-containing metallo-enzymes. Among these four families, USPs represent the most widespread and represented deubiquitinating enzymes across evolution. USPs tend to release ubiquitin from a conjugated protein. They display similar catalytic domains containing conserved Cys and His boxes but divergent N-terminal and occasionally C-terminal extensions, which are thought to function in substrate recognition, subcellular localization, and protein-protein interactions.

## Application Notes

The stated application concentrations are suggested starting points. Titration of the USP14 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A portion of amino acids 1-30 from the human protein was used as the immunogen for the USP14 antibody.

## Storage

Aliquot the USP14 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Copyright © NSJ Bioreagents. All rights reserved.