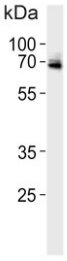
USP2 Antibody (F54759)

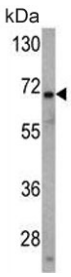
Catalog No.	Formulation	Size
F54759-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54759-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

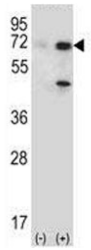
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	O75604
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry (FFPE) : 1:25
Limitations	This USP2 antibody is available for research use only.



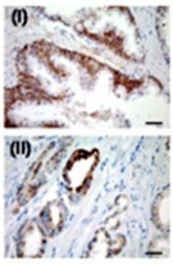
Western blot testing of rat heart lysate with USP2 antibody. Predicted molecular weight ~68 kDa.



Western blot testing of human HL60 cell lysate with USP2 antibody. Predicted molecular weight ~68 kDa.



Western blot testing of 1) non-transfected and 2) transfected 293 cell lysate with USP2 antibody.



IHC staining of FFPE human prostate with USP2 antibody. Cytoplasmic positive immunostaining was detected in tumor glands (ii), whereas in normal prostatic epithelium USP2a expression was restricted to the basal layer (i).

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 USP2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 71-101 from the human protein was used as the immunogen for the USP2 antibody.

Storage

Aliquot the USP2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.