**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for AP12009PU-N

## USP4 (C-term) Rabbit Polyclonal Antibody

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Applications:** | IHC, WB |
| **Recommended Dilution:** | ELISA: 1/1,000.<br>Western Blot: 1/100-1/500.<br>Immunohistochemistry: 1/50-1/100. |
| **Reactivity:** | Human |
| **Host:** | Rabbit |
| **Isotype:** | Ig |
| **Clonality:** | Polyclonal |
| **Immunogen:** | This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the C-terminal region of human USP4. |
| **Specificity:** | This antibody is specific to USP4 (C-term). |
| **Formulation:** | PBS with 0.09% (W/V) Sodium Azide as preservative.<br>State: Purified<br>State: Liquid purified Ig fraction. |
| **Concentration:** | lot specific |
| **Purification:** | Protein G Chromatography, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS. |
| **Conjugation:** | Unconjugated |
| **Storage:** | Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. |
| **Stability:** | Shelf life: one year from despatch. |
| **Gene Name:** | ubiquitin specific peptidase 4 |
| **Database Link:** | Entrez Gene 7375 Human<br>Q13107 |

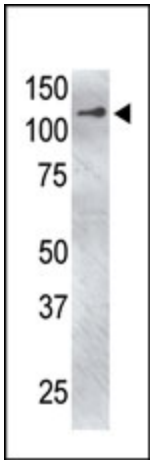
View online »

**Background:** 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.

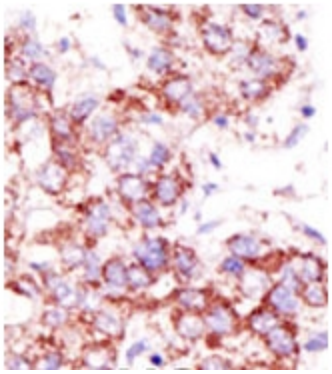
**Synonyms:** Ubiquitin carboxyl-terminal hydrolase 4, UNPH

Note: **Predicted Molecular weight:** 108564 Da

## Product images:




The anti-USP4 (C-term) Pab is used in Western blot to detect USP4 in USP4-transfected HeLa cell lysate. Transfection data is kindly provided by Dr. B. Pierrat from the Novartis Institute for Biomedical Research (Basel, Switzerland).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.