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USP26 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2151b

Product Information

Application	IHC-P, E
Primary Accession	Q9BXU7
Other Accession	NP_114113
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4369/4370
Calculated MW	104047
Antigen Region	884-913

Additional Information

Gene ID	83844
Other Names	Ubiquitin carboxyl-terminal hydrolase 26, Deubiquitinating enzyme 26, Ubiquitin thioesterase 26, Ubiquitin-specific-processing protease 26, USP26
Target/Specificity	This USP26 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 884~913 amino acids from the C-terminal region of human USP26.
Dilution	IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	USP26 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	USP26 (HGNC:13485)
Function	Deubiquitinase regulating several biological processes through the deubiquitination of components of these processes (PubMed:20501646, PubMed:28839133). Involved in somatic cell reprogramming through the

	'Lys-48'-linked deubiquitination and stabilization of CBX4 and CBX6, two components of the polycomb- repressive complex 1 (PRC1) (PubMed:28839133). Also deubiquitinates and probably stabilizes the androgen receptor (AR), regulating the androgen receptor signaling pathway (PubMed:20501646). May play a role in spermatogenesis (PubMed:34202084).
Cellular Location	Nucleus. Cytoplasm, cytoskeleton, flagellum axoneme
Tissue Location	Expressed in testis..

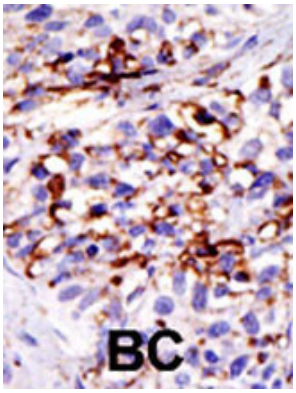
Background

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.

References

Puente, X.S., et al., Nat. Rev. Genet. 4(7):544-558 (2003).
Wang, P.J., et al., Nat. Genet. 27(4):422-426 (2001).

Images



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

Citations

- Ubiquitin Specific Protease 26 (USP26) expression analysis in human testicular and extragonadal tissues indicates diverse action of USP26 in cell differentiation and tumorigenesis.