10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-USP20 / VDU2 Antibody
Peptide-affinity purified goat antibody
Catalog # AF2138a

Specification

Goat Anti-USP20 / VDU2 Antibody - Product Information

Application	**IHC, WB**
Primary Accession	Q9Y2K6
Other Accession	NP_006667, 10868, 74270 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Cow, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**102003**

Goat Anti-USP20 / VDU2 Antibody - Additional Information

Gene ID 10868

Other Names
Ubiquitin carboxyl-terminal hydrolase 20, 3.4.19.12, Deubiquitinating enzyme 20, Ubiquitin thioesterase 20, Ubiquitin-specific-processing protease 20, VHL-interacting deubiquitinating enzyme 2, hVDU2, USP20, KIAA1003, LSFR3A, VDU2

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-USP20 / VDU2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-USP20 / VDU2 Antibody - Protein Information

Name USP20

Synonyms KIAA1003, LSFR3A, VDU2

Function
Deubiquitinating enzyme that plays a role in many cellular processes including autophagy, cellular antiviral response or membrane protein biogenesis (PubMed:<a

href="http://www.uniprot.org/citations/27801882" target="_blank">27801882, PubMed:29487085). Attenuates TLR4- mediated NF-kappa-B signaling by cooperating with beta-arrestin-2/ARRB2 and inhibiting TRAF6 autoubiquitination (PubMed:26839314). Promotes cellular antiviral responses by deconjugating 'Lys-33' and 'Lys-48'- linked ubiquitination of STING1 leading to its stabilization (PubMed:27801882). Plays an essential role in autophagy induction by regulating the ULK1 stability through deubiquitination of ULK1 (PubMed:29487085). Acts as a positive regulator for NF-kappa-B activation by TNF-alpha through deubiquitinating 'Lys-48'-linked polyubiquitination of SQSTM1, leading to its increased stability (PubMed:32354117). Acts as a regulator of G-protein coupled receptor (GPCR) signaling by mediating the deubiquitination beta-2 adrenergic receptor (ADRB2)(PubMed:19424180). Plays a central role in ADRB2 recycling and resensitization after prolonged agonist stimulation by constitutively binding ADRB2, mediating deubiquitination of ADRB2 and inhibiting lysosomal trafficking of ADRB2. Upon dissociation, it is probably transferred to the translocated beta-arrestins, possibly leading to beta-arrestins deubiquitination and disengagement from ADRB2 (PubMed:19424180). This suggests the existence of a dynamic exchange between the ADRB2 and beta-arrestins. Deubiquitinates DIO2, thereby regulating thyroid hormone regulation. Deubiquitinates HIF1A, leading to stabilize HIF1A and enhance HIF1A-mediated activity (PubMed:15776016). Deubiquitinates MCL1, a pivotal member of the anti- apoptotic Bcl-2 protein family to regulate its stability (PubMed:35063767). Within the endoplasmic reticulum, participates with USP33 in the rescue of post-translationally targeted membrane proteins that are inappropriately ubiquitinated by the cytosolic protein quality control in the cytosol (PubMed:33792613).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:Q8C6M1}. Endoplasmic reticulum. Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

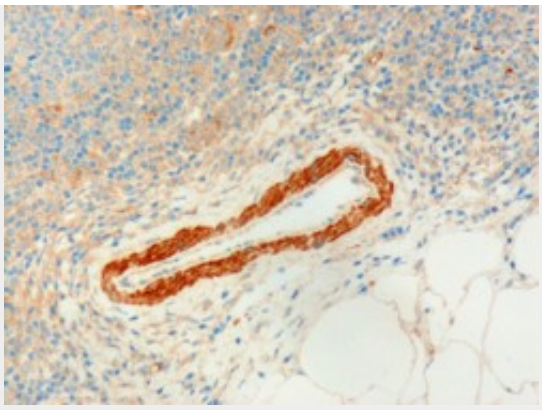
Goat Anti-USP20 / VDU2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-USP20 / VDU2 Antibody - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



AF2138a (3 µg/ml) staining of paraffin embedded Human Lymph Node. Microwaved antigen retrieval with Tris/EDTA buffer pH9, HRP-staining.



Antibody (3µg/ml) staining of paraffin embedded Human Lymph Node. Microwaved antigen retrieval with Tris/EDTA buffer pH9, HRP-staining.

Goat Anti-USP20 / VDU2 Antibody - References

Association of genetic variants with hemorrhagic stroke in Japanese individuals. Yoshida T, et al. Int J Mol Med, 2010 Apr. PMID 20198315.
Assessment of a polymorphism of SDK1 with hypertension in Japanese Individuals. Oguri M, et al. Am J Hypertens, 2010 Jan. PMID 19851296.
Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.
The deubiquitinases USP33 and USP20 coordinate beta2 adrenergic receptor recycling and resensitization. Berthouze M, et al. EMBO J, 2009 Jun 17. PMID 19424180.
Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.