

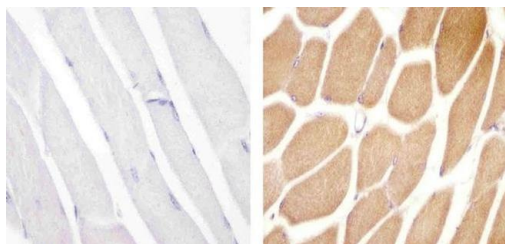
# VPS34 Polyclonal Antibody

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Rat, Pig, Non-human primate, Hamster, Mouse, Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide derived from the mid region of the human VPS34 protein.
Form	Liquid
Concentration	0.25 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage conditions	-20°C
RRID	AB_2533360

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-dependent	22 Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1:20	-
Immunocytochemistry (ICC/IF)	-	4 Publications
Immunoprecipitation (IP)	Assay-dependent	6 Publications
Miscellaneous PubMed (Misc)	-	4 Publications

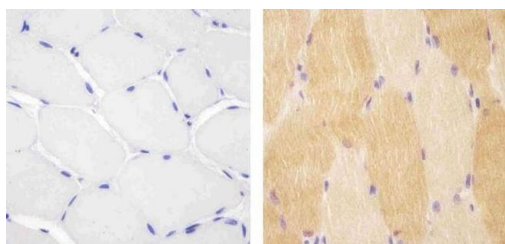
## Product Images For VPS34 Polyclonal Antibody

### VPS34 Antibody (38-2100) in IHC (P)



Immunohistochemistry analysis of VPS34 showing staining in the cytoplasm of paraffin-embedded mouse skeletal muscle tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with a Anti-VPS34 Polyclonal Antibody (Product # 38-2100) diluted in 3% BSA-PBS at a dilution of 1:20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

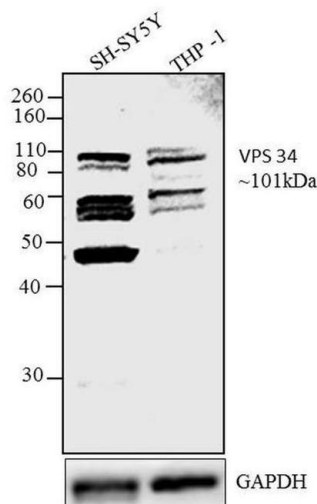
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Immunohistochemistry analysis of VPS34 showing staining in the cytoplasm of paraffin-embedded human skeletal muscle tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with a Anti-VPS34 Polyclonal Antibody (Product # 38-2100) diluted in 3% BSA-PBS at a dilution of 1:20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

### VPS34 Antibody (38-2100) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of SH-SY5Y (Lane 1) and THP-1 (Lane 2). The blots were probed with Anti-VPS 34 Rabbit Polyclonal Antibody (Product # 38-2100, 1-3 µg/mL) and detected by chemiluminescence Goat Anti-Rabbit IgG Secondary Antibody, HRP conjugate (Product # G-21234, 1:5000 dilution). A 101 kDa band corresponding to VPS 34 along with extra band was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE®10 % Bis-Tris gel (Product # NP0301BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane by Pierce™ Power Blotter System (22834). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



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## 37 References

### Western Blot (22)

#### Autophagy

#### PLA2G4A/cPLA2-mediated lysosomal membrane damage leads to inhibition of autophagy and neurodegeneration after brain trauma.

"38-2100 was used in Western Blotting to demonstrate that LMP occurs in neurons following controlled cortical impact induced traumatic brain injury in mice, leading to impaired macroautophagy and neuronal cell death."

Authors: Sarkar C, Jones JW, Hegdekar N, Thayer JA, Kumar A, Faden AI, Kane MA, Lipinski MM

**Species**  
Mouse

**Dilution**  
1:1,000

**Year**  
2020

#### Journal of neuroinflammation

#### Lipopolysaccharide induces neuroinflammation in microglia by activating the MTOR pathway and downregulating Vps34 to inhibit autophagosome formation.

"Published figure using VPS34 polyclonal antibody (Product # 38-2100) in Western Blot"

Authors: Ye X, Zhu M, Che X, Wang H, Liang XJ, Wu C, Xue X, Yang J

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2020

[View more WB references on thermofisher.com](#)

### Immunohistochemistry (1)

#### Gut pathogens

#### Probiotic Lactobacillus rhamnosus GG mono-association suppresses human rotavirus-induced autophagy in the gnotobiotic piglet intestine.

"38-2100 was used in immunohistochemistry (paraffin) and western blot to test if rotavirus gastroenteritis activates autophagy and if Lactobacillus rhamnosus suppresses virus-induced autophagy to prevent intestinal damage in infected piglets."

Authors: Wu S, Yuan L, Zhang Y, Liu F, Li G, Wen K, Kocher J, Yang X, Sun J

**Species**  
Pig

**Dilution**  
Not Cited

**Year**  
2013

### Immunocytochemistry (4)

#### Molecular carcinogenesis

#### Abrus agglutinin stimulates BMP-2-dependent differentiation through autophagic degradation of -catenin in colon cancer stem cells.

"Published figure using VPS34 polyclonal antibody (Product # 38-2100) in Immunocytochemistry"

Authors: Panda PK, Naik PP, Praharaj PP, Meher BR, Gupta PK, Verma RS, Maiti TK, Shanmugam MK, Chinnathambi A, Alharbi SA, Sethi G, Agarwal R, Bhutia SK

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

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### More applications with references on thermofisher.com

IP (6)

Misc (4)

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