



### GTX300077 Vimentin Antibody Panel

#### Content

Cat No	Product Name	Applications	Package
GTX61473	Vimentin (phospho Ser72) antibody [EP1070Y]	IP, WB	25 µl
GTX61472	Vimentin (phospho Ser82) antibody [EP1071Y]	WB	25 µl
GTX213110-01	Rabbit IgG antibody (HRP)	Dot, ELISA, IHC-P, WB	25 µl
GTX100619	Vimentin antibody	ICC/IF, IHC-Fr, IHC-P, IP, WB	25 µl
GTX61471	Vimentin (phospho Ser38) antibody [EP1069Y]	ICC/IF, WB	25 µl

#### Note

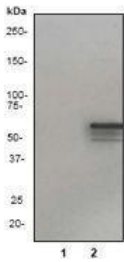
For *In vitro* laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

#### DataSheet - 1

<b>Catalog Number</b>	GTX61473
<b>Product Name</b>	Vimentin (phospho Ser72) antibody [EP1070Y]
<b>Full Name</b>	vimentin
<b>Synonyms</b>	FLJ36605, VIM, Vimentin (phospho S72), Vimentin (phospho Ser72), Vimentin (pS72), Vimentin (pSer72), Vimentin phospho S72, Vimentin phospho Ser72, Phospho Vimentin (S72), Phospho Vimentin (Ser72), Phospho Vimentin (pS72), Phospho Vimentin (pSer72)
<b>Product Description</b>	Rabbit monoclonal antibody [EP1070Y] to Vimentin (phospho Ser72)
<b>Specificity</b>	The antibody only detects Vimentin phosphorylated at Serine 72.
<b>Background</b>	Vimentin is the most common member of intermediate filament (IF) family and one of the main components in cytoskeleton structure. It is expressed in during cell development and differentiation in variety of mesenchymal cells and cell types derived from mesoderm . Vimentin is essential in the role of cell integrity and cytoskeletal stability. The reorganization of Vimentin, similar to all IF proteins, occurs during different stages of the cell cycle and cell signaling by a site-specific phosphorylation (serine and threonine residues) . In particular, p21-activated kinase (PAK) phosphorylates at Ser25, Ser38, Ser50, Ser65 and Ser72 which induces Vimentin specific reorganization . During cytokinesis, Vimentin is regulated by Rho-kinase (ROCK) and Aurora B through phosphorylation at Ser38 and Ser72 . Also, coordinated by ROCK and Aurora B, Plk1 induces phosphorylation at Ser82 plays an important role in Vimentin segregation .
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Clone Name</b>	EP1070Y
<b>Isotype</b>	IgG
<b>Target</b>	Vimentin Phospho (pS72)
<b>Immunogen</b>	A synthetic acetylated peptide corresponding to residues surrounding Ser72 of Vimentin was used as an immunogen.
<b>Antigen Species</b>	Human
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Applications</b>	IP, WB
<b>Application Note</b>	<b>Recommended Starting Dilutions:</b> For WB: Use at a dilution of 1:50,000 - 200,000 For IP: Use at a dilution of 1:40

Optimal working dilution for a specific application should be determined by the investigator.

<b>Predicted Target Size</b>	57
<b>Form Supplied</b>	Liquid
<b>Purification</b>	Tissue culture supernatant
<b>Storage Buffer</b>	50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage Instruction</b>	Store at -20 °C. Stable for 12 months from date of receipt.
<b>Notes</b>	For <i>In vitro</i> laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption. RabMAb® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,488.
<b>ResearchArea</b>	<a href="#">Cancer &gt; Tumor biomarkers</a> <a href="#">Cell Biology &gt; Cytoskeleton</a> <a href="#">Disease Related &gt; Alzheimer's disease</a>



#### GTx61473 WB Image

A. Western blot analysis on 1) untreated and 2) Calyculin A treated HeLa cell lysate using anti-Vimentin (pS72) RabMab (Cat. # GTx61473).

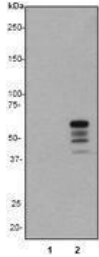
#### DataSheet - 2

<b>Catalog Number</b>	GTX61472
<b>Product Name</b>	Vimentin (phospho Ser82) antibody [EP1071Y]
<b>Full Name</b>	vimentin
<b>Synonyms</b>	FLJ36605, VIM, Vimentin (phospho S82), Vimentin (phospho Ser82), Vimentin (pS82), Vimentin (pSer82), Vimentin phospho S82, Vimentin phospho Ser82, Phospho Vimentin (S82), Phospho Vimentin (Ser82), Phospho Vimentin (pS82), Phospho Vimentin (pSer82)
<b>Product Description</b>	Rabbit monoclonal antibody [EP1071Y] to Vimentin (phospho Ser82)
<b>Specificity</b>	The antibody only detects Vimentin phosphorylated at Serine 82.
<b>Background</b>	Vimentin is the most common member of intermediate filament (IF) family and one of the main components in cytoskeleton structure. It is expressed in during cell development and differentiation in variety of mesenchymal cells and cell types derived from mesoderm . Vimentin is essential in the role of cell integrity and cytoskeletal stability. The reorganization of Vimentin, similar to all IF proteins, occurs during different stages of the cell cycle and cell signaling by a site-specific phosphorylation (serine and threonine residues) . In particular, p21-activated kinase (PAK) phosphorylates at Ser25, Ser38, Ser50, Ser65 and Ser72 which induces Vimentin specific reorganization . During cytokinesis, Vimentin is regulated by Rho-kinase (ROCK) and Aurora B through phosphorylation at Ser38 and Ser72 . Also, coordinated by ROCK and Aurora B, Plk1 induces phosphorylation at Ser82 plays an important role in Vimentin segregation .
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Clone Name</b>	EP1071Y
<b>Isotype</b>	IgG
<b>Target</b>	Vimentin Phospho (pS82)
<b>Immunogen</b>	A synthetic acetylated peptide corresponding to residues surrounding Ser82 of Vimentin was used as an immunogen.
<b>Antigen Species</b>	Human
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Applications</b>	WB
<b>Application Note</b>	<b>Recommended Starting Dilutions:</b> For WB: Use at a dilution of 1:10,000 - 50,000 Optimal working dilution for a specific application should be determined by the investigator.

<b>Predicted Target Size</b>	57
<b>Form Supplied</b>	Liquid
<b>Purification</b>	Tissue culture supernatant
<b>Storage Buffer</b>	50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage Instruction</b>	Store at -20 °C. Stable for 12 months from date of receipt.

**Notes**  
For *In vitro* laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption. RabMAb® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,488.

**ResearchArea**  
[Cancer > Tumor biomarkers](#)  
[Cell Biology > Cytoskeleton](#)  
[Disease Related > Alzheimer's disease](#)



**GTX61472 WB Image**

A. Western blot analysis on 1) AP treated and 2) untreated HeLa + Calyculin A cell lysate using anti-Vimentin (pS82) RabMab (Cat. # GTX61472).

**DataSheet - 3**

<b>Catalog Number</b>	GTX213110-01	Package: 1 ml	<a href="#">Reference</a> ( 38 )
<b>Product Name</b>	Rabbit IgG antibody (HRP)		
<b>Synonyms</b>	antiRabbit IgG antibody, anti-Rabbit IgG antibody, Goat antiRabbit IgG HRP, Rabbit IgG secondary antibody, Goat anti-Rabbit IgG HRP, anti Rabbit IgG antibody, Goat anti Rabbit IgG HRP		
<b>Product Description</b>	HRP-conjugated Goat anti-Rabbit IgG polyclonal antibody		
<b>Background</b>	Immunoglobulin G (IgG), is one of the most abundant proteins in serum with normal levels between 8-17 mg/ml in adult blood. IgG is important for our defence against microorganisms and the molecules are produced by B lymphocytes as a part of our adaptive immune response. The IgG molecule has two separate functions; to bind to the pathogen that elicited the response and to recruit other cells and molecules to destroy the antigen. The variability of the IgG pool is generated by somatic recombination and the number of specificities in an individual at a given time point is estimated to be 1011 variants.		
<b>Host</b>	Goat		
<b>Clonality</b>	Polyclonal		
<b>Isotype</b>	IgG		
<b>Target</b>	Rabbit IgG		
<b>Immunogen</b>	Highly purified whole rabbit IgG		
<b>Antigen Species</b>	Rabbit		
<b>Cross Reactivity Note</b>	Rabbit		
<b>Applications</b>	Dot, ELISA, IHC-P, WB		

	Suggested dilution	Reference
<b>Application Note</b> Dot blot	Assay-dependent dilution	
ELISA	Assay-dependent dilution	
IHC (Formalin-fixed paraffin-embedded sections)	1:100-1:1000*	
Western blot	Assay-dependent dilution	

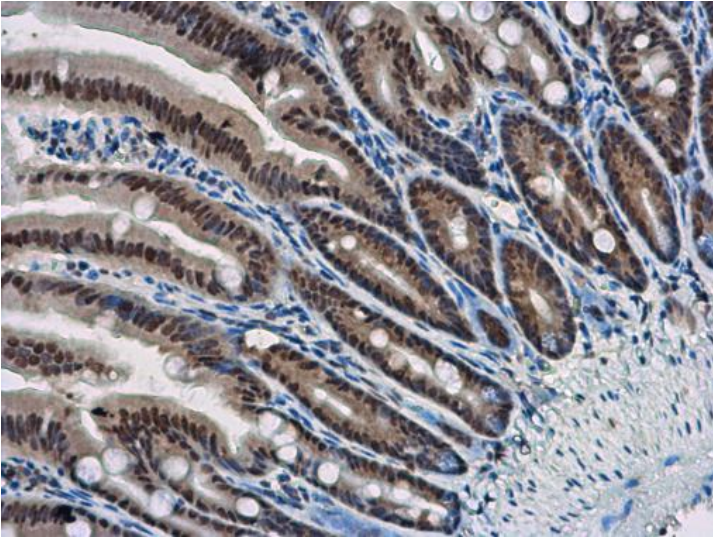
Not tested in other applications.

\*Optimal dilutions/concentrations should be determined by the researcher.

Optimal dilution concentrations should be determined by the researcher.

Conjugation	HRP
Form Supplied	Liquid
Purification	Affinity purified with antigen
Concentration	0.15 mg/ml (Please refer to the vial label for the specific concentration)
Storage Buffer	0.05M Tris, 0.15M NaCl (pH7.4), 1%BSA. 0.025% ProCin 300 was added as a preservative.
Storage Instruction	Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

**Notes** For *In vitro* laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



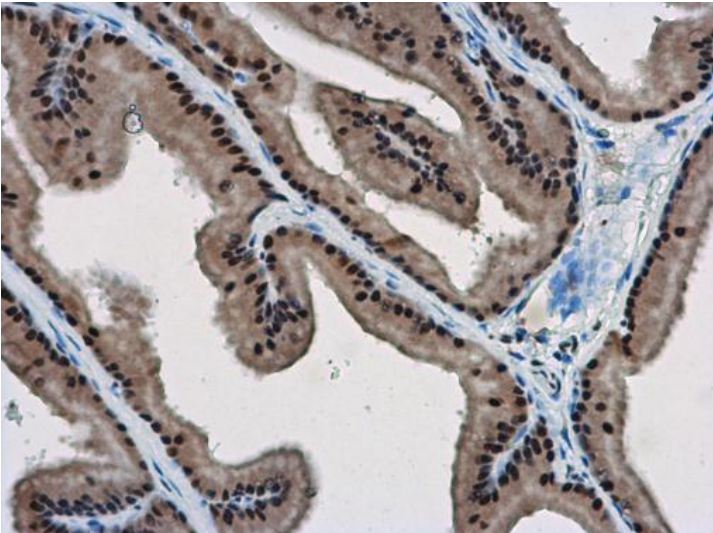
#### GTX213110-01 IHC-P Image

WBP11 antibody detects WBP11 protein at nucleus in mouse intestine by immunohistochemical analysis.

Sample: Paraffin-embedded mouse intestine.

WBP11 antibody (GTX118654) diluted at 1:500.

The signal was developed by Rabbit IgG antibody (HRP) (GTX213110-01)



#### GTX213110-01 IHC-P Image

WBP11 antibody detects WBP11 protein at nucleus in rat prostate by immunohistochemical analysis.

Sample: Paraffin-embedded rat prostate.

WBP11 antibody (GTX118654) diluted at 1:500.

The signal was developed by Rabbit IgG antibody (HRP) (GTX213110-01).

#### Application Reference

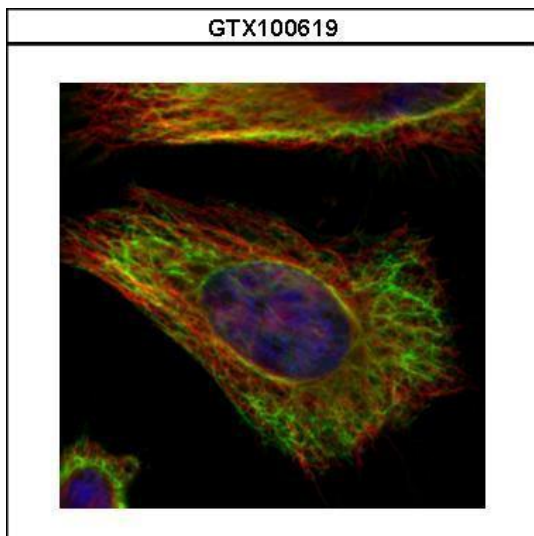
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#### DataSheet - 4

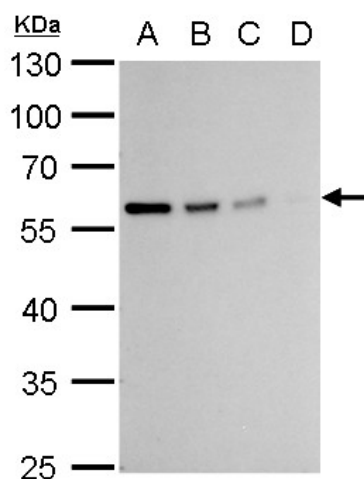
<b>Catalog Number</b>	GTX100619	Package:25 µl, 100 µl	★★★★★ (1)	<a href="#">Reference</a> (18)
<b>Product Name</b>	Vimentin antibody			
<b>Full Name</b>	vimentin			
<b>Synonyms</b>	FLJ36605 antibody, VIM antibody, vimentin antibody			
<b>Product Description</b>	Rabbit Polyclonal antibody to Vimentin (vimentin)			
<b>Background</b>	Along with the microfilaments (actins) and microtubules (tubulins), the intermediate filaments represent a third class of well-characterized cytoskeletal elements. The subunits display a tissue-specific pattern of expression. Desmin (MIM 125660) is the subunit specific for muscle and vimentin the subunit specific for mesenchymal tissue.[supplied by OMIM]			
<b>Host</b>	Rabbit			
<b>Clonality</b>	Polyclonal			
<b>Isotype</b>	IgG			
<b>Immunogen</b>	Recombinant protein encompassing a sequence within the center region of human Vimentin. The exact sequence is proprietary.			
<b>Antigen Species</b>	Human			
<b>Species Reactivity</b>	Human, Mouse, Rat			
<b>Predicted Cross Reactivity species</b>	Dog, Chicken, Chimpanzee, Bovine, Guinea pig			
<b>Predict Reactivity Note</b>	Dog (98%), Chicken (91%), Chimpanzee (99%), Bovine (98%), Guinea pig (97%)			
<b>Applications</b>	ICC/IF, IHC-Fr, IHC-P, IP, WB			
<b>Application Note</b>		Suggested dilution	Reference	
	ICC/IF	1:100-1:1000*		
	IHC (Frozen sections)	1:100-1:1000*		
	IHC (Formalin-fixed paraffin-embedded sections)	1:100-1:1000*		
	Immunoprecipitation	1:100-1:500*		
	Western blot	1:500-1:20000*		
	Not tested in other applications.			
	*Optimal dilutions/concentrations should be determined by the researcher.			

<b>Positive Controls</b>	293T , HeLa , NIH-3T3 , PC-12 , Rat2 , *A549
<b>Predicted Target Size</b>	54 kDa
<b>Conjugation</b>	Unconjugated
<b>Form Supplied</b>	Liquid
<b>Purification</b>	Purified by antigen-affinity chromatography.
<b>Concentration</b>	1 mg/ml (Please refer to the vial label for the specific concentration)
<b>Storage Buffer</b>	1XPBS, 20% Glycerol (pH7). 0.025% ProClin 300 was added as a preservative.
<b>Storage Instruction</b>	Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.
<b>Notes</b>	For <i>In vitro</i> laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.
<b>ResearchArea</b>	<a href="#">Cancer</a> > <a href="#">Tumor biomarkers</a> <a href="#">Cell Biology</a> > <a href="#">Cytoskeleton</a> <a href="#">Disease Related</a> > <a href="#">Alzheimer's disease</a>



#### GTX100619 ICC/IF Image

Confocal immunofluorescence analysis (Olympus FV10i) of methanol-fixed HeLa, using Vimentin(GTX100619) antibody (Green) at 1:500 dilution. Alpha-tubulin filaments were labeled with GTX11304 (Red) at 1:2000.



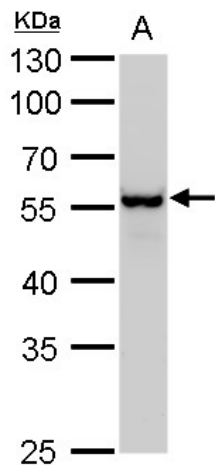
#### GTX100619 WB Image

Vimentin antibody detects Vimentin protein by western blot analysis.

- A. 20 µg 293T whole cell lysate/extract
- B. 10 µg 293T whole cell lysate/extract
- C. 5 µg 293T whole cell lysate/extract
- D. 1 µg 293T whole cell lysate/extract

10 % SDS-PAGE

Vimentin antibody (GTX100619) dilution: 1:10000



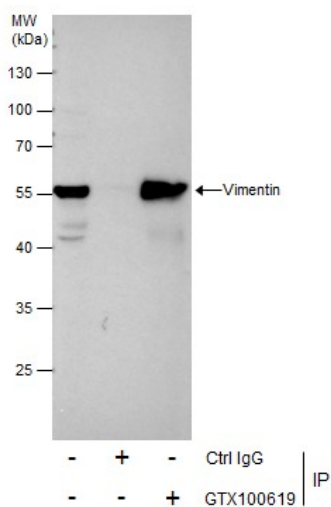
**GTX100619 WB Image**

Vimentin antibody detects Vimentin protein by western blot analysis.

A. 30 µg NIH-3T3 whole cell lysate/extract

10 % SDS-PAGE

Vimentin antibody (GTX100619) dilution: 1:2000

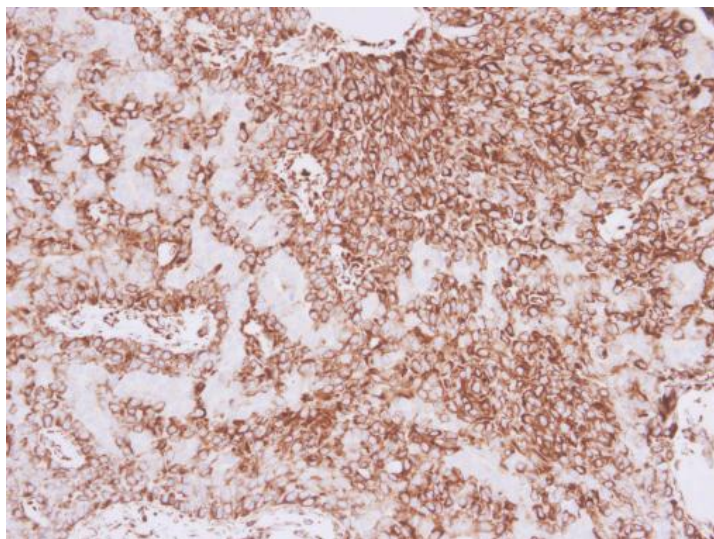


**GTX100619 IP Image**

Immunoprecipitation of Vimentin protein from HeLa whole cell extracts using 5 µg of Vimentin antibody (GTX100619).

Western blot analysis was performed using Vimentin antibody (GTX100619).

EasyBlot anti-Rabbit IgG (GTX221666-01) was used as a secondary reagent.

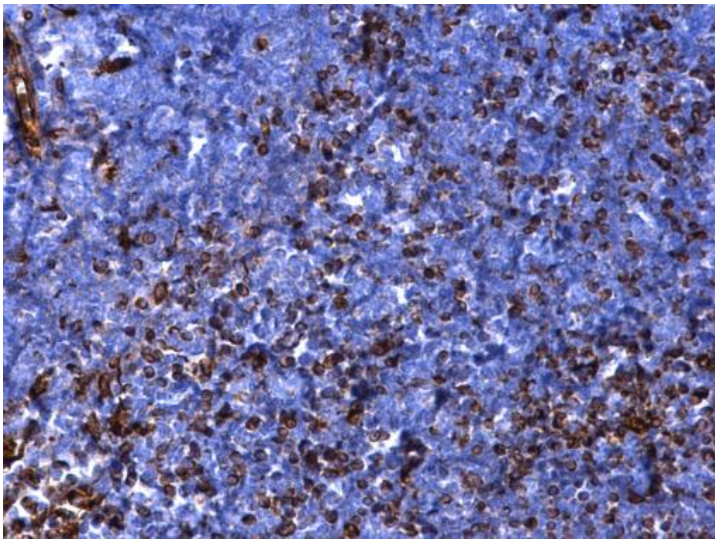


**GTX100619 IHC-P Image**

Vimentin antibody detects Vimentin protein at cytoplasm in human lung adenocarcinoma by immunohistochemical analysis.

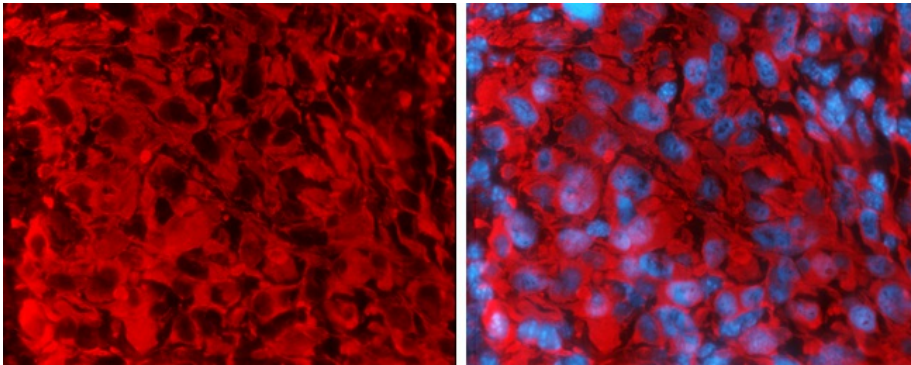
Sample: Paraffin-embedded human lung adenocarcinoma.

Vimentin antibody (GTX100619) diluted at 1:500.



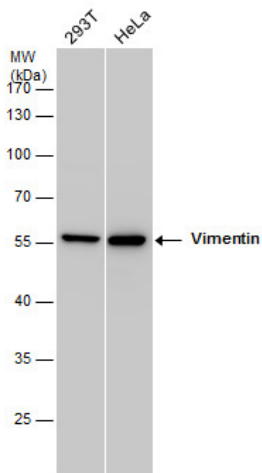
**GTX100619 IHC-P Image**

Vimentin antibody detects Vimentin protein at cytosol on mouse thymus gland by immunohistochemical analysis.  
Sample: Paraffin-embedded mouse thymus gland.  
Vimentin antibody (GTX100619) dilution: 1:500.



**GTX100619 IHC-Fr Image**

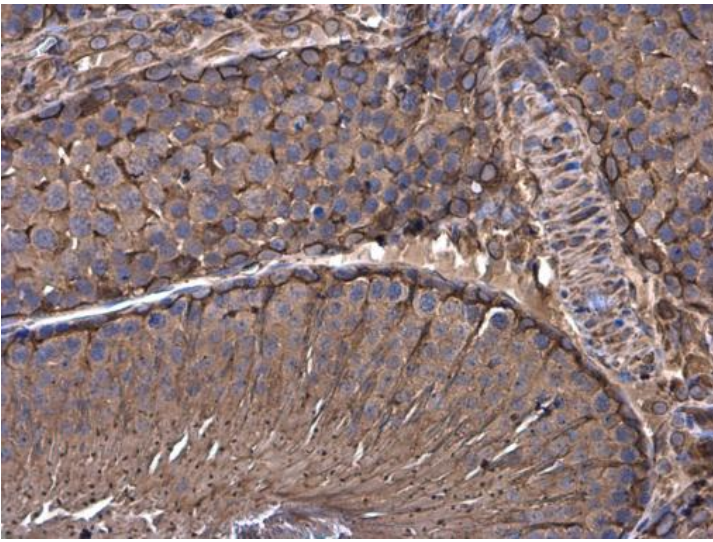
Immunofluorescence photomicrographs of frozen sections of mouse brain.  
Green: Vimentin antibody (GTX100619) diluted at 1:200. The signal was developed using goat anti-rabbit IgG antibody (Dylight594) (GTx213110-05).  
Blue: Nuclear staining with Hoechst 33342.



**GTX100619 WB Image**

Vimentin antibody detects Vimentin protein by western blot analysis. Various whole cell extracts (30 µg) were separated by 10% SDS-PAGE, and the membrane was blotted with Vimentin antibody (GTX100619) diluted at a dilution of 1:10000.



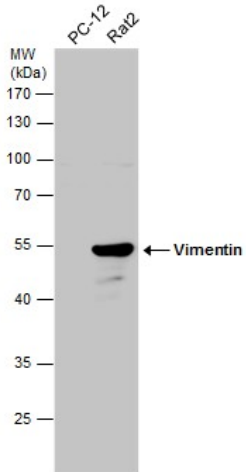


**GTX100619 IHC-P Image**

Vimentin antibody detects Vimentin protein at cytoplasm in rat testis by immunohistochemical analysis.

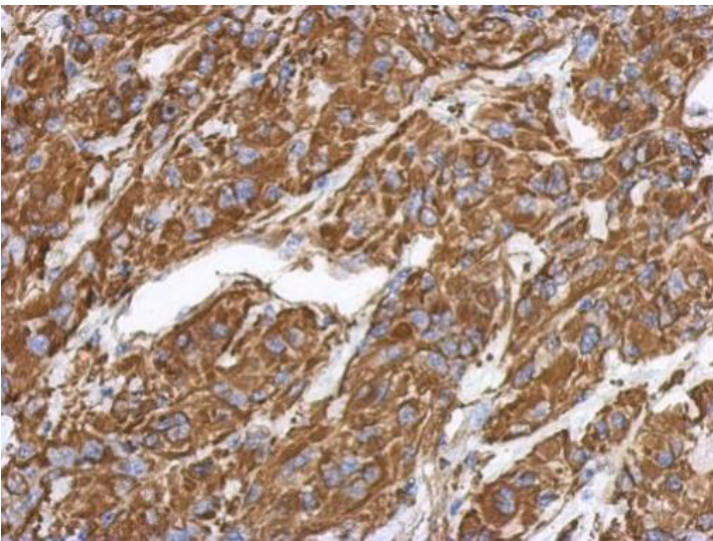
Sample: Paraffin-embedded rat testis.

Vimentin antibody (GTX100619) diluted at 1:500.



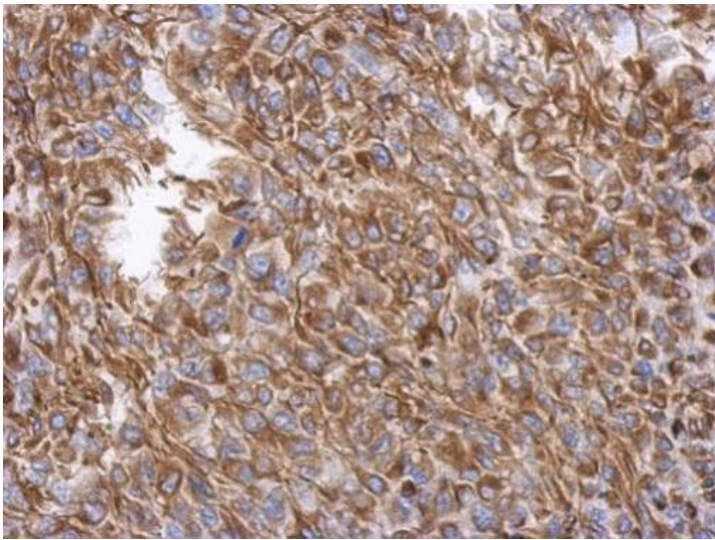
**GTX100619 WB Image**

Various whole cell extracts (30 µg) were separated by 10% SDS-PAGE, and the membrane was blotted with Vimentin antibody (GTX100619) diluted at 1:10000.



**GTX100619 IHC-P Image**

Immunohistochemical analysis of paraffin-embedded U373 xenograft, using Vimentin(GTX100619) antibody at 1:500 dilution.



#### GTX100619 IHC-P Image

Immunohistochemical analysis of paraffin-embedded RT2 xenograft, using Vimentin(GTX100619) antibody at 1:500 dilution.

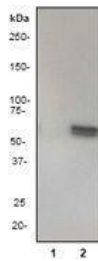
#### Application Reference

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#### DataSheet - 5

Catalog Number	GTX61471	<a href="#">Reference</a> (1)
Product Name	Vimentin (phospho Ser38) antibody [EP1069Y]	
Full Name	vimentin	
Synonyms	FLJ36605, VIM, Vimentin (phospho S38), Vimentin (phospho Ser38), Vimentin (pS38), Vimentin (pSer38), Vimentin phospho S38, Vimentin phospho Ser38, Phospho Vimentin (S38), Phospho Vimentin (Ser38), Phospho Vimentin (pS38), Phospho Vimentin (pSer38)	
Product Description	Rabbit monoclonal antibody [EP1069Y] to Vimentin (phospho Ser38)	
Specificity	The antibody only detects Vimentin phosphorylated at Serine 38.	
Background	<p>Vimentin is the most common member of intermediate filament (IF) family and one of the main components in cytoskeleton structure. It is expressed in during cell development and differentiation in variety of mesenchymal cells and cell types derived from mesoderm . Vimentin is essential in the role of cell integrity and cytoskeletal stability. The reorganization of Vimentin, similar to all IF proteins, occurs during different stages of the cell cycle and cell signaling by a site-specific phosphorylation (serine and threonine residues) . In particular, p21-activated kinase (PAK) phosphorylates at Ser25, Ser38, Ser50, Ser65 and Ser72 which induces Vimentin specific reorganization . During cytokinesis, Vimentin is regulated by Rho-kinase (ROCK) and Aurora B through phosphorylation at Ser38 and Ser72 . Also, coordinated by ROCK and Aurora B, Plk1 induces phosphorylation at Ser82 plays an important role in Vimentin segregation .</p>	
Host	Rabbit	
Clonality	Monoclonal	
Clone Name	EP1069Y	
Isotype	IgG	
Target	Vimentin Phospho (pS38)	

<b>Immunogen</b>	A synthetic acetylated peptide corresponding to residues surrounding Ser38 of Vimentin was used as an immunogen.
<b>Antigen Species</b>	Human
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Applications</b>	ICC/IF, WB
<b>Application Note</b>	<b>Recommended Starting Dilutions:</b> For WB: Use at a dilution of 1:5,000 - 20,000 Optimal working dilution for a specific application should be determined by the investigator.
<b>Predicted Target Size</b>	57
<b>Form Supplied</b>	Liquid
<b>Purification</b>	Tissue culture supernatant
<b>Storage Buffer</b>	50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage Instruction</b>	Store at -20 °C. Stable for 12 months from date of receipt.
<b>Notes</b>	For <i>In vitro</i> laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption. RabMAb® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,488.
<b>ResearchArea</b>	<a href="#">Cancer &gt; Tumor biomarkers</a> <a href="#">Cell Biology &gt; Cytoskeleton</a> <a href="#">Disease Related &gt; Alzheimer's disease</a>



**GTX61471 WB Image**

A. Western blot analysis on 1) untreated and 2) Calyculin A treated HeLa cell lysate using anti-Vimentin (pS38) RabMab (Cat. # GTX61471).

**Application Reference**

1. Ise H (2012) *Glycobiology* 788-805