

For Research Use Only

# TBXA2R Polyclonal antibody

Catalog Number: 27159-1-AP

Featured Product

4 Publications



## Basic Information

### Catalog Number:

27159-1-AP

### Size:

150ul, Concentration: 300 ug/ml by Nanodrop and 267 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG25670

### GenBank Accession Number:

BC074750

### GeneID (NCBI):

6915

### UNIPROT ID:

P21731

### Full Name:

thromboxane A2 receptor

### Calculated MW:

343aa, 37 kDa; 1043aa, 113 kDa

### Observed MW:

50-60 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: HT-29 cells, DU 145 cells, human placenta tissue, MCF-7 cells, PC-3 cells, Hela cells

**IHC**: human prostate cancer tissue, human breast cancer tissue

## Background Information

TBXA2R, also named as thromboxane A2 receptor, TXA2-R and Prostanoid TP receptor, belongs to G-protein coupled receptor 1 family. Thromboxane A2 receptor is a key molecule in hemostasis as its abnormality leads to bleeding disorders. The TXA2-R receptor is linked via a guanine nucleotide-binding protein (G protein) to phospholipase C (PLC), which hydrolyses phosphoinositides to the two potent stimulatory second messengers inositol 1,4,5-triphosphate (IP3) and diacylglycerol. IP3 causes increases in cytoplasmic free calcium and diacylglycerol causes activation of protein kinase C. In the kidney, the binding of TXA2-R to glomerular TP receptors causes intense vasoconstriction. The two isoforms expressed in cultured cells show similar ligand binding characteristics and phospholipase C (PLC) activation but oppositely regulate adenylyl cyclase activity (PMID: 8613548).

## Notable Publications

| Author            | Pubmed ID | Journal                     | Application |
|-------------------|-----------|-----------------------------|-------------|
| Toshio Suzuki     | 35728047  | Am J Respir Crit Care Med   | WB          |
| Meihe Li          | 33868179  | Front Endocrinol (Lausanne) | WB, IHC     |
| Deepika Narayanan | 38822924  | Arch Dermatol Res           |             |

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

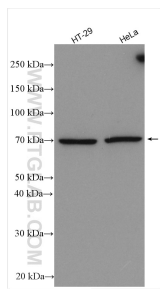
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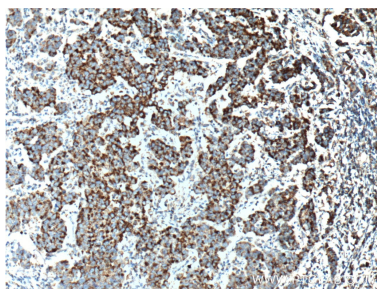
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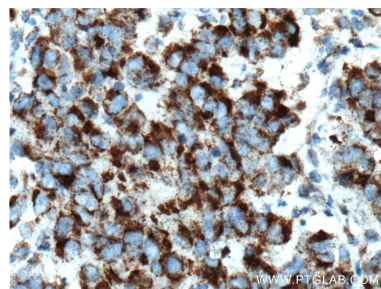
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 27159-1-AP (TBXA2R antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 27159-1-AP (TBXA2R Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 27159-1-AP (TBXA2R Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).