

## Datasheet: AHP2224

|                      |                     |
|----------------------|---------------------|
| <b>Description:</b>  | RABBIT ANTI VPS34   |
| <b>Specificity:</b>  | VPS34               |
| <b>Other names:</b>  | PI3-KINASE TYPE 3   |
| <b>Format:</b>       | Purified            |
| <b>Product Type:</b> | Polyclonal Antibody |
| <b>Isotype:</b>      | Polyclonal IgG      |
| <b>Quantity:</b>     | 0.1 mg              |

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|                            | Yes | No | Not Determined | Suggested Dilution |
|----------------------------|-----|----|----------------|--------------------|
| Flow Cytometry             |     |    | ▪              |                    |
| Immunohistology - Frozen   |     |    | ▪              |                    |
| Immunohistology - Paraffin |     |    | ▪              |                    |
| ELISA                      |     |    | ▪              |                    |
| Immunoprecipitation        |     |    | ▪              |                    |
| Western Blotting           | ▪   |    |                | 2.0 - 4.0ug/ml     |
| Immunofluorescence         | ▪   |    |                | 1/100              |

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

|                                       |                                                                                                                                                             |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target Species</b>                 | Human                                                                                                                                                       |
| <b>Species Cross Reactivity</b>       | Reacts with: Mouse, Rat<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species.                                                 |
| <b>Product Form</b>                   | Purified IgG - liquid                                                                                                                                       |
| <b>Antiserum Preparation</b>          | Antiserum to human VSP34 was raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography. |
| <b>Buffer Solution</b>                | Phosphate buffered saline.                                                                                                                                  |
| <b>Preservative Stabilisers</b>       | 0.09% Sodium Azide (NaN <sub>3</sub> )                                                                                                                      |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0mg/ml                                                                                                                                  |

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen</b>                     | KLH conjugated synthetic peptide corresponding to amino acids 22-34 of human VPS34, The corresponding sequence is identical in mouse and rat.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>External Database Links</b>       | <p><b>UniProt:</b></p> <p><a href="#">Q8NEB9</a>    <a href="#">Related reagents</a></p> <p><a href="#">O88763</a>    <a href="#">Related reagents</a></p> <p><a href="#">Q6PF93</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">5289</a>    PIK3C3    <a href="#">Related reagents</a></p> <p><a href="#">65052</a>    Pik3c3    <a href="#">Related reagents</a></p> <p><a href="#">225326</a>    Pik3c3    <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>                      | Vps34, VPS34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Specificity</b>                   | <p><b>Rabbit anti VPS34 antibody</b> recognises Phosphatidylinositol 3-kinase catalytic subunit type 3, also known as VPS34 (vacuolar protein sorting 34), PI3-kinase type 3 or PIK3C3. VPS34 is a ubiquitously expressed class III PI3K (phosphoinositide 3-kinase), and member of the PI3/PI4-kinase family, which utilizes phosphatidylinositol (PtdIn) as a substrate, and functions as the catalytic subunit of the PI3K complex.</p> <p>VPS34 plays a role in the transport of lysosomal enzyme precursors to lysosomes, and in endocytosis and vesicular trafficking, and has been strongly implicated as a regulator of autophagy, forming a multi-protein complex with the proautophagic tumor suppressors Beclin1/Atg6, Bif-1, and UVRAG, in the initiation of autophagosome formation. Distinct complexes of VPS34 regulates endocytic processes vital for late-stage autophagosome-lysosome fusion.</p> |
| <b>Western Blotting</b>              | AHP224 detects a band of approximately 105kDa in HEK-293T cell lysates.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Storage</b>                       | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Shelf Life</b>                    | 18 months from date of despatch.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Related Products

### Recommended Secondary Antibodies

|                                        |                                                                     |
|----------------------------------------|---------------------------------------------------------------------|
| Sheep Anti Rabbit IgG (2AB02...)       | <a href="#">Biotin</a>                                              |
| Sheep Anti Rabbit IgG (STAR34...)      | <a href="#">FITC</a>                                                |
| Sheep Anti Rabbit IgG (STAR35...)      | <a href="#">RPE</a>                                                 |
| Goat Anti Rabbit IgG (Fc) (STAR121...) | <a href="#">Biotin</a> , <a href="#">FITC</a> , <a href="#">HRP</a> |

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)  
Sheep Anti Rabbit IgG (STAR54...) [HRP](#)  
Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),  
[DyLight®680](#), [DyLight®800](#)

## Recommended Useful Reagents

[TidyBlot™ WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
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'M279362:160115'

Printed on 25 May 2017

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