

## Product datasheet

### PE Anti-p53R2 antibody [EPR8816] ab225205

Recombinant RabMAb

2 Images

#### Overview

<b>Product name</b>	PE Anti-p53R2 antibody [EPR8816]
<b>Description</b>	PE Rabbit monoclonal [EPR8816] to p53R2
<b>Host species</b>	Rabbit
<b>Conjugation</b>	PE. Ex: 488nm, Em: 575nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Flow Cyt (intra): A673 cells
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot. Store at +4°C. Do Not Freeze. Store In the Dark.
<b>Storage buffer</b>	<p>pH: 7.4</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 1% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR8816
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab225205 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/5000. The cellular localisation of this product has been verified in ICC/IF.

## Target

### Function

Plays a pivotal role in cell survival by repairing damaged DNA in a p53/TP53-dependent manner. Supplies deoxyribonucleotides for DNA repair in cells arrested at G1 or G2. Contains an iron-tyrosyl free radical center required for catalysis. Forms an active ribonucleotide reductase (RNR) complex with RRM1 which is expressed both in resting and proliferating cells in response to DNA damage.

### Tissue specificity

Widely expressed at a high level in skeletal muscle and at a weak level in thymus. Expressed in epithelial dysplasias and squamous cell carcinoma.

### Pathway

Genetic information processing; DNA replication.

### Involvement in disease

Defects in RRM2B are the cause of mitochondrial DNA depletion syndrome type 8A (MTDPS8A) [MIM:612075]. A disorder due to mitochondrial dysfunction characterized by various combinations of neonatal hypotonia, neurological deterioration, respiratory distress, lactic acidosis, and renal tubulopathy.

Defects in RRM2B are the cause of mitochondrial DNA depletion syndrome type 8B (MTDPS8B) [MIM:612075]. A disease due to mitochondrial dysfunction and characterized by ophthalmoplegia, ptosis, gastrointestinal dysmotility, cachexia, peripheral neuropathy.

Defects in RRM2B are the cause of progressive external ophthalmoplegia with mitochondrial DNA deletions autosomal dominant type 5 (PEOA5) [MIM:613077]. A disorder characterized by progressive weakness of ocular muscles and levator muscle of the upper eyelid. In a minority of cases, it is associated with skeletal myopathy, which predominantly involves axial or proximal muscles and which causes abnormal fatigability and even permanent muscle weakness. Ragged-red fibers and atrophy are found on muscle biopsy. A large proportion of chronic ophthalmoplegias are associated with other symptoms, leading to a multisystemic pattern of this disease. Additional symptoms are variable, and may include cataracts, hearing loss, sensory axonal neuropathy, ataxia, depression, hypogonadism, and parkinsonism.

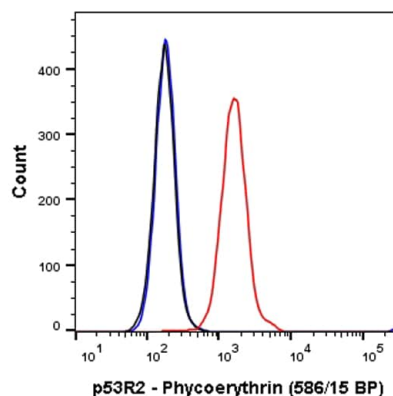
### Sequence similarities

Belongs to the ribonucleoside diphosphate reductase small chain family.

### Cellular localization

Cytoplasm. Nucleus. Translocates from cytoplasm to nucleus in response to DNA damage.

## Images



Flow Cytometry (Intracellular) - PE Anti-p53R2 antibody [EPR8816] (ab225205)

Overlay histogram showing A-673 (human muscle Ewing's Sarcoma cell line) cells stained with ab225205 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab225205, 1/5000 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Phycoerythrin ([ab209478](#)) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

This antibody gave a positive signal in A673 cells fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

PE Anti-p53R2 antibody [EPR8816] (ab225205)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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