**Product datasheet**

**Anti-ZAK antibody ab65249**

### Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-ZAK antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit polyclonal to ZAK</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Specificity</td>
<td>ab65249 detects endogenous levels of total ZAK protein.</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: ICC/IF, WB</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide derived from C terminus of human ZAK</td>
</tr>
<tr>
<td>Positive control</td>
<td>HeLa cell extracts and HepG2 cells.</td>
</tr>
<tr>
<td>General notes</td>
<td>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>pH: 7.40</td>
</tr>
<tr>
<td></td>
<td>Preservative: 0.02% Sodium azide</td>
</tr>
<tr>
<td></td>
<td>Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride</td>
</tr>
<tr>
<td></td>
<td>Without Mg2+ and Ca2+</td>
</tr>
<tr>
<td>Purity</td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
</tr>
</tbody>
</table>
The Abpromise guarantee

Our Abpromise guarantee covers the use of ab65249 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td></td>
<td>1/500 - 1/1000.</td>
</tr>
<tr>
<td>WB</td>
<td></td>
<td>1/500 - 1/1000. Detects a band of approximately 91 kDa (predicted molecular weight: 91 kDa).</td>
</tr>
</tbody>
</table>

Target

Function
Stress-activated component of a protein kinase signal transduction cascade. Regulates the JNK and p38 pathways. Part of a signaling cascade that begins with the activation of the adrenergic receptor ADRA1B and leads to the activation of MAPK14. Pro-apoptotic. Role in regulation of S and G2 cell cycle checkpoint by direct phosphorylation of CHEK2. Isoform 1, but not isoform 2, causes cell shrinkage and disruption of actin stress fibers. Isoform 1 may have role in neoplastic cell transformation and cancer development. Isoform 1, but not isoform 2, phosphorylates histone H3 at ‘Ser-28’.

Tissue specificity
Ubiquitously expressed. Isoform 2 is the predominant form in all tissues examined, except for liver, in which isoform 1 is more highly expressed.

Sequence similarities
Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily. Contains 1 protein kinase domain. Contains 1 SAM (sterile alpha motif) domain.

Cellular localization
Cytoplasm. Nucleus. Translocates to the nucleus upon ultraviolet B irradiation.

Images

ab65249 at 1/500 dilution staining ZAK in HepG2 cells by Immunofluorescence, in the absence or presence of the immunising peptide.
All lanes: Anti-ZAK antibody (ab65249) at 1/500 dilution

Lane 1: HeLa cell extract
Lane 2: HeLa cell extract with immunising peptide at 5 µg

Lysates/proteins at 5 µg per lane.

Predicted band size: 91 kDa
Observed band size: 91 kDa

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

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- Replacement or refund for products not performing as stated on the datasheet
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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- 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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