Product Description

The tetracycline (tet) regulatory system is widely used for selective target gene regulation in eukaryotic cells. MoBiTec now offers a unique set of polyclonal and monoclonal antibodies targeting the Tet-Repressor protein (TetR) for study of this popular system. These antibodies possess excellent binding properties and have been successfully tested for use in ELISA, Western blot and immunofluorescence assays. Two options for the monoclonal antibodies are offered. First an optimized mix consisting of two different epitope-specific monoclonal antibodies (TET02), and second a single monoclonal antibody, which can be used for immunofluorescence microscopy (TET03). The rabbit polyclonal antibody (TET01) can be used in all three above-mentioned applications. These antibodies provide an excellent new tool for elucidating the tet regulatory system.

Summary of the three antibodies

<table>
<thead>
<tr>
<th></th>
<th>TET01</th>
<th>TET02</th>
<th>TET03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Rabbit polyclonal IgG</td>
<td>monoclonal IgG1;κ mix</td>
<td>monoclonal IgG1;κ</td>
</tr>
<tr>
<td>Immunogen</td>
<td>TetR(B)-tetO</td>
<td>TetR(B)-tetO</td>
<td>TetR(B)-tetO</td>
</tr>
<tr>
<td>Purification</td>
<td>Affinity purified via Protein G columns</td>
<td>Affinity purified via Protein A or G columns</td>
<td>Affinity purified via Protein A or G columns</td>
</tr>
<tr>
<td>Epitope</td>
<td>TetR(B): Amino acid # 84 - 98 Amino acid # 26 -53</td>
<td>TetR(B): Amino acid # 37 - 44</td>
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<tr>
<td>Reconstitution in</td>
<td>200 µl dest. H₂O</td>
<td>100 µl dest. H₂O</td>
<td>100 µl dest. H₂O</td>
</tr>
<tr>
<td>Working dilution for immunofluorescence</td>
<td>n.d.</td>
<td>n.d.</td>
<td>1:100 - 1:500</td>
</tr>
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<td>Working dilution for Western blots and ELISA</td>
<td>1:1000</td>
<td>1:500 - 1:2000</td>
<td>1:1000</td>
</tr>
<tr>
<td>Detection limit ELISA</td>
<td>0.2 ng</td>
<td>20 - 50 pg</td>
<td>n.d.</td>
</tr>
<tr>
<td>Detection limit Western Blot</td>
<td>0.8 ng</td>
<td>0.8 - 1.0 ng</td>
<td>5 ng</td>
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</tbody>
</table>

Fig.1: Structure of the Tet-Repressor (D)-[tc•Mg]⁺ complex. The folding of the polypeptide chain is represented by a ribbon diagram. The subunits are shown in different colors. Illustration provided by Dr. E. Pook, Institute of Microbiology and Biochemistry, University of Erlangen-Nürnberg, Germany.
**Fig.3:** ELISA of polyclonal anti-TetR antibody. Wells were coated with TetR(B) overnight, blocked with 3% BSA and 0.05% Tween20 for 3 h at 37°C, incubated with anti-TetR (diluted 1:1000) for 1 h at 37°C followed by 1 h at 37°C with Protein A-alkaline-phosphatase. Substrate: 2 mg/ml para-nitrophenyl-phosphate in diethanolamine. Absorption measured at 405 nm.

**Fig.4:** HeLa cells transfected with the plasmid pUHD15-1 (TetOFF). Monoclonal anti-TetR antibodies and secondary goat anti-mouse antibodies labeled with Alexa Fluor® 488 were used to stain TetOFF repressor protein.

**Features**

- Prime tool for studying tet regulatory systems in eukaryotic cells
- Suited for ELISA, Western blots and immunofluorescence
- Excellent binding properties
- Monoclonal IgG1;κ
- Polyclonal rabbit IgG
- Immunogen: TetR(B)-tetO
  (Accession no. P04483)
- Tet-Repessor positive control protein also available

**Perfectly suited for detection of:**

- Tet-Repessor (TetR)
- Fusion protein (TetR-Fusion)
- Tetracycline responsive transactivator (tTA)
- reverse tetracycline responsive transactivator (rtTA) including derivates like rtTA-S or rtTA-M

**Examples of different application**
Order information, shipping & storage

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>TET01S</td>
<td>Anti-Tet-Repessor, polyclonal rabbit, lyophilized, Sample Size</td>
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<td>TET01</td>
<td>Anti-Tet-Repessor, polyclonal rabbit, lyophilized</td>
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<tr>
<td>TET02</td>
<td>Anti-Tet-Repessor, monoclonal mouse IgG1 mix, lyophilized</td>
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<td>TET03</td>
<td>Anti-Tet-Repessor, monoclonal mouse IgG1, lyophilized</td>
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<tr>
<td>TETR1</td>
<td>Tet-Repessor protein (23 kDa) positive control</td>
<td>1 µg</td>
</tr>
</tbody>
</table>

shipped at RT; store at 4°C; *200 µl have been lyophilized
Literature

Tet regulatory system:


References with Tet antibodies


