Datasheet: MCA1538

<table>
<thead>
<tr>
<th>Description:</th>
<th>MOUSE ANTI HUMAN THIOREDOXIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specificity:</td>
<td>THIOREDOXIN</td>
</tr>
<tr>
<td>Other names:</td>
<td>TXN</td>
</tr>
<tr>
<td>Format:</td>
<td>Purified</td>
</tr>
<tr>
<td>Product Type:</td>
<td>Monoclonal Antibody</td>
</tr>
<tr>
<td>Clone:</td>
<td>2B1</td>
</tr>
<tr>
<td>Isotype:</td>
<td>IgG1</td>
</tr>
<tr>
<td>Quantity:</td>
<td>0.2 mg</td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
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<tr>
<td>Immunohistology - Frozen</td>
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<tr>
<td>Immunohistology - Paraffin</td>
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<tr>
<td>ELISA</td>
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<td>Immunoprecipitation</td>
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<tr>
<td>Western Blotting</td>
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<td>10ug/ml - 50ug/ml</td>
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</tbody>
</table>

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

**Target Species**

Human

**Species Cross Reactivity**

Reacts with: Marmoset

**N.B.** Antibody reactivity and working conditions may vary between species.

**Product Form**

Purified IgG - liquid

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

0.09% Sodium Azide

**Approx. Protein Concentrations**

IgG concentration 1.0 mg/ml

**Immunogen**

Recombinant human thioredoxin.
**Specificity**

Mouse anti Human thioredoxin antibody, clone 2B1 recognizes human thioredoxin, also known as ATL-derived factor or Surface-associated sulphhydryl protein. Thioredoxin is a 105 amino acid ~12kDa dithiol oxidoreductase with powerful protein disulphide oxidoreductase activity containing a single thioredoxin domain (UniProt: P10599). Thioredoxin is involved in a number of cellular processes, including activation of the transcription factor NF-KB (Kelleher et al. 2014). Thioredoxin is highly expressed in the glandular cells of the GI tract and uterine tissues, also activated B and T-cells (Rubartelli et al. 1992).

Mouse anti Human thioredoxin antibody, clone 2B1 has been used successfully in a biotinylated format as a detection reagent in a thioredoxin sandwich ELISA as part of a study looking at thioredoxin levels in placental trophoblast cells (Di Trapani et al. 1998), a study which also used the antibody for immunoprecipitation of thioredoxin as well as detection of thioredoxin by western blotting. Mouse anti Human thioredoxin antibody, clone 2B1 is also useful for the demonstration of thioredoxin expression on formalin fixed, paraffin embedded material by immunohistochemistry (Lincoln et al. 2003). Clone 2B1 has also been used as a capture reagent in a sandwich ELISA for thioredoxin (Perking et al. 1995).

**References**

trophoblast cells. Mol Hum Reprod. 4: 369-75.

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation available at:
Material Safety Datasheet Documentation #10040 available at:

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR8...) DyLight®800
Goat Anti Mouse IgG (STAR76...) RPE
Rabbit Anti Mouse IgG (STAR12...) RPE
Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP
Human Anti Mouse IgG1 (HCA036...) HRP
Goat Anti Mouse IgG (STAR70...) FITC
Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP
Rabbit Anti Mouse IgG (STAR13...) HRP
Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...) FITC
Goat Anti Mouse IgG (STAR77...) HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)