TSH Receptor Monoclonal Antibody (49)

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>MA3-218</th>
</tr>
</thead>
</table>

**Details**
- Size: 100 µL
- Host/Isotope: Mouse / IgG1
- Class: Monoclonal
- Type: Antibody
- Clone: 49
- Immunogen: Purified extracellular domain of recombinant human thyrotropin receptor.
- Conjugate: Unconjugated
- Form: Liquid
- Storage buffer: ascites
- Contains: 0.05% sodium azide
- Storage Conditions: -20 °C, Avoid Freeze/Thaw Cycles

**Species Reactivity**
- Tested species reactivity: Human, Pig
- Published species reactivity: Not Applicable

**Tested Applications**
- ELISA (ELISA): Assay dependent
- Immunocytochemistry (ICC): 1:250
- Immunofluorescence (IF): 1:250
- Western Blot (WB): 1:250

**Published Applications**
- Miscellaneous PubMed (MISC): See 3 publications below

**Product specific information**
MA3-218 detects both glycosylated and nonglycosylated thyroid stimulating hormone receptor (TSHR) from porcine tissues as well as recombinant human TSHR.

MA3-218 has been successfully used in Western blot, immunofluorescence, and ELISA procedures. By Western blot, this antibody detects a 50 kDa and a 63 kDa protein representing unglycosylated and glycosylated TSHR respectively, in transfected Sf9 cell extract. By ELISA MA3-218 has been used in TSH competitive inhibition studies.

The MA3-218 antigen is purified extracellular domain of recombinant human thyrotropin receptor. This antibody recognizes an epitope between amino acid residues 277-296 of human TSHR.

**Background/Target Information**
The thyroid stimulating hormone (thyrotropin) receptor (TSHR) is expressed on the surface of thyrocyte cell membranes and is crucial for thyroid gland growth and function. TSHR and its targets are for the pathogenesis of many autoimmune diseases including Graves disease and primary myxedema. This 7-transmembrane-domain protein contains 5 potential extracellular N-linked glycosylation sites. Antibodies to TSHR can affect receptor function in a number of different ways. TSHR antibodies which can inhibit TSH binding to the receptor are called TSH binding inhibitor immunoglobulins or TBIIs.

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.


Products are warranted to operate or perform substantially in conformance with published Product specifications in effect ..., ... at 60X magnification.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OR REFUND FOR THE NON-CONFORMING PRODUCTS AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPARE, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANER FOR WHICH THEY WERE NOT DESIGNED, (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS, (V) USER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OR REFUND FOR THE NON-CONFORMING PRODUCTS AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPARE, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANER FOR WHICH THEY WERE NOT DESIGNED, (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS.
### PubMed References For TSH Receptor Monoclonal Antibody (49)

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable / Not Cited</td>
<td>MA3-218 was used in western blot and immunoprecipitation to study the expression and function of thyrotropin receptor in murine dendritic cells and in lymph node T cells. Journal of immunology (Baltimore, Md. : 1950) (Jun 2000; 164: 6158) &quot;The thyrotropin (thyroid-stimulating hormone) receptor is expressed on murine dendritic cells and on a subset of CD45RBhigh lymph node T cells: functional role for thyroid-stimulating hormone during immune activation.&quot; Author(s):Bariaglik EU,Klein JR PubMed Article URL:<a href="http://dx.doi.org/null">http://dx.doi.org/null</a></td>
</tr>
<tr>
<td>Not Applicable / Not Cited</td>
<td>MA3-218 was used in ELISA to investigate the expression of mET-gp and characterize the difference of epitopes between mET-gp and TSHR-gp</td>
</tr>
<tr>
<td>Not Applicable / Not Cited</td>
<td>MA3-218 was used in blocking/activating experiment and ELISA to characterize human TSH receptor antibodies in vitro and in vivo</td>
</tr>
<tr>
<td>Not Applicable / Not Cited</td>
<td>Endocrinology (Apr 1997; 138: 1559) &quot;Differential reactivities of recombinant glycosylated ectodomains of mouse and human thyrotropin receptors with patient autoantibodies.&quot; Author(s):Patiibandla SA,Seetharamaiah GS,Dallas JS,Thotakura NR,Peake RL,Prabhakar BS PubMed Article URL:<a href="http://dx.doi.org/10.1210/endo.138.4.5093">http://dx.doi.org/10.1210/endo.138.4.5093</a></td>
</tr>
<tr>
<td>Not Applicable / Not Cited</td>
<td>Endocrinology (Jul 1995; 136: 2817) &quot;Generation and characterization of monoclonal antibodies to the human thyrotropin (TSH) receptor: antibodies can bind to discrete conformational or linear epitopes and block TSH binding.&quot; Author(s):Seetharamaiah GS,Wagle NM,Morris JC,Prabhakar BS PubMed Article URL:<a href="http://dx.doi.org/10.1210/endo.136.7.7540542">http://dx.doi.org/10.1210/endo.136.7.7540542</a></td>
</tr>
</tbody>
</table>


Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package insert(s) ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, the warranty is limited to one year from date of shipment when the Product is subjected to normal proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OR REFUND FOR THE NON-COMFORMING PRODUCTS AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE, OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and as not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, or in vivo or in vivo therapeutic uses, or any type of consumption by or application to humans or animals.