Alexa Fluor® 488 Mouse Anti-Human Somatostatin

Product Information

Material Number: 566032
Alternate Name: growth hormone release-inhibiting factor, SST
Size: 50 µg
Concentration: 0.2 mg/ml
Clone: U24-354
Immunogen: Human Preprosomatostatin Recombinant Protein
Isotype: Mouse IgG2b, κ
Reactivity: QC Testing: Human
Lack of Reactivity Confirmed in Development: Mouse, Rat
Storage Buffer: Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

Somatostatin is produced by neuroendocrine neurons in the hypothalamus and β cells in the islets of Langerhans of the pancreas. It is a regulatory hormone that affects neurotransmission, cell proliferation, and numerous hormones of the endocrine system. Via interaction with high affinity G protein-coupled somatostatin receptors, it inhibits the secretion of somatotropin (also known as growth hormone or GH), thyroid-stimulating hormone (thyrotropin or TSH), and most gastrointestinal and pancreatic hormones, including glucagon and insulin. The expression of somatostatin can be used to monitor the pancreatic differentiation of pluripotent stem cells.

The human somatostatin gene, SST, encodes the precursor molecule preprosomatostatin (amino acids 1-116), which is cleaved to form prosomatostatin (amino acids 15-116), which in turn is cleaved to form either of 2 alternative active somatostatin peptides, somatostatin-28 (amino acids 89-116) or somatostatin-14 (amino acids 103-116). The U16-850 monoclonal antibody detects human preprosomatostatin in somatostatin-producing cells.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to Alexa Fluor® 488 under optimum conditions, and unreacted Alexa Fluor® 488 was removed.
Application Notes

Application

<table>
<thead>
<tr>
<th>Intracellular staining (flow cytometry)</th>
<th>Routinely Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunofluorescence</td>
<td>Tested During Development</td>
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</tbody>
</table>

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<tr>
<td>554655</td>
<td>Fixation Buffer</td>
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<tr>
<td>558050</td>
<td>Perm Buffer III</td>
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<td>550524</td>
<td>Retrievagen A (pH 6.0)</td>
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<tr>
<td>564907</td>
<td>DAPI Solution</td>
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<tr>
<td>565891</td>
<td>BV421 Mouse Anti-Glucagon</td>
<td>50 µg</td>
<td>U16-850</td>
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<tr>
<td>565689</td>
<td>Alexa Fluor® 647 Mouse Anti-Insulin</td>
<td>25 µg</td>
<td>T56-706</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
4. Alexa Fluor® 488 fluorochrome emission is collected at the same instrument settings as for fluorescein isothiocyanate (FITC).
5. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
6. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. An isotype control should be used at the same concentration as the antibody of interest.

References