Human NT-3 Biotinylated Antibody
Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF267

DESCRIPTION
Species Reactivity Human
Specificity Detects human NT-3 in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant human (rh) BDNF, rhβ-NGF, rhNT-4, rhCNTF and rhGDNF is observed.
Source Polyclonal Goat IgG
Purification Antigen Affinity-purified
Immunogen S. frugiperda insect ovarian cell line Sf21-derived recombinant human NT-3 (R&D Systems, Catalog # 267-N3) Tyr139-Thr257
Accession # P20783
Formulation Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
<th>Human NT-3 Sandwich Immunoassay</th>
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<tr>
<td></td>
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<td>ELISA Capture 2-8 μg/mL</td>
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<td></td>
<td>Reagent Human NT-3 Antibody (Catalog # MAB267)</td>
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<td>ELISA Detection 0.1-0.4 μg/mL</td>
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<td>Standard Human NT-3 Biotinylated Antibody (Catalog # BAF267)</td>
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<td></td>
<td></td>
<td>Recombinant Human NT-3 (Catalog # 267-N3)</td>
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PREPARATION AND STORAGE
Reconstitution Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND
Neurotrophin-3 (NT-3) is a member of the NGF family of neurotrophic factors (also named neurotrophins) that are required for the differentiation and survival of specific neuronal subpopulations in both the central as well as the peripheral nervous systems. The neurotrophin family is comprised of at least four proteins including NGF, BDNF, NT-3, and NT-4/5. These secreted cytokines are synthesized as prepropeptides that are proteolytically processed to generate the mature proteins. All neurotrophins have six conserved cysteine residues that are involved in the formation of three disulfide bonds and all share approximately 55% sequence identity at the amino acid level. Similarly to NGF, bioactive NT-3 is predicted to be a non-covalently linked homodimer.

The NT-3 cDNA encodes a 257 amino acid residue precursor protein with a signal peptide and a proprotein that are cleaved to yield the 119 amino acid residue mature NT-3. The amino acid sequence of mature NT-3 is identical in human, mouse and rat. NT-3 transcripts have been detected in the cerebellum, hippocampus, placenta, heart, skin, and skeletal muscle. NT-3 primarily activates the TrkC tyrosine kinase receptor. In addition, NT-3 can activate Trk and TrkB kinase receptors in certain cell systems. NT-3 can also bind with low affinity to the low affinity NGF receptor.

References: