



Genorise® Recombinant Canine Neurotrophin 4 DataSheet

Catalog Number: GR122076

Background

Neurotrophin-4 (NT-4), also known as neurotrophin-5 (NT-5), is a protein that is encoded by the NTF4 gene.^[1] It is a neurotrophic factor that signals predominantly through the TrkB receptor tyrosine kinase. Neurotrophin-4 is a novel neurotrophic factor that activates trk and trkB.^[2] Neurotrophins and their receptors stimulate melanoma cell proliferation and migration.^[3] Increased serum neurotrophin-4/5 levels was observed in bipolar disorder.^[4] Elevated intra-amniotic levels of docosahexaenoic acid and arachidonic acid in the mid-trimester are correlated with increased NT4 concentrations.^[5]

References

1. Ip NY et al. (1992) Proc. Natl. Acad. Sci. U.S.A. 89 (7), 3060-3064.
2. Berkemeier LR, et al. (1991) Neuron 7 (5), 857-866.
3. Truzzi F, et al. (2008). J. Invest. Dermatol. 128(8): 2031-40.
4. Walz JC, et al. (2009). J Psychiatr Res. 43 (7): 721-3.
5. Benn K et al. (2014) Reprod Sci 21 (11), 1395-1400.

Related products

1. GR238016 50 ml Reagent Reservoir, 100/case, 5 packs/case (pack of 20)
2. GR238004 Tissue Culture 96-well Microplate, individually packed, Case of 50
3. GR238019 1.5 ml Microcentrifuge tube with screw cap and free-standing, pack of 500
4. GR238007 125 ml leak-resistant HDPE bottle, colorless, pack of 24
5. GR238002 Microplate 12x8-Well Strip High Binding, Case of 50
6. GR238003 Microplate 12x8-Well Strip Medium Binding, Case of 50
7. GR238032 42592 Costar Stripwell Microplate 1 x 8 Flat Bottom, High Binding, Case of 100
8. GR238001 468667 Thermo Microplate 12x8-Well Strip Nunc Maxisorp F8, Case of 60
9. GR238031 96-well microplate sealer plastic, pack of 100

DECLARATION

THIS REAGENT IS FOR IN VITRO LABORATORY TESTING AND RESEARCH USE ONLY. DO NOT USE IT FOR CLINICAL DIAGNOSTICS. DO NOT USE OR INJECT IT IN HUMANS AND ANIMALS.



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Description

Source: *E. coli* derived

Amino acid sequence: Leu37-Ser156

Accession # A0A8C0PL35

Structure/Form: Disulfide-linked homodimer

Predicted Molecular Mass: 13 kDa

Specifications

SDS-PAGE: 13 kDa, reducing conditions

Activity Measured in a cell proliferation assay using BaF mouse pro-B cells transfected with TrkB. The ED50 for this effect is 0.4-3 ng/mL.

Endotoxin Level: < 0.01 EU per 1 µg of the protein by the LAL method.

Purity: > 95%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation: Lyophilized from 0.2 µm filtered solution in Acetonitrile and TFA with BSA as a carrier protein.

Preparation and Storage

Reconstitution: Reconstitute at 50-500 µg/mL in sterile PBS with 0.1% BSA.

Shipping: The product is shipped at ambient temperature or in a foam box with ice pads. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze thaw cycles.

- 6 months from date of receipt, -20 to -70°C as supplied.
- 1 month, -20 to -70°C under sterile conditions after reconstitution.

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