

VGF antibody (pAb)

Rabbit Anti-Human/Mouse/Rat VGF (Neurosecretory protein, nerve growth factor inducible)

Instruction Manual

Catalog Number	PK-AB718-4611
Synonyms	VGF Antibody; Neurosecretory protein VGF, VGF nerve growth factor inducible
Description	VGF was initially identified as a rapidly regulated gene product in nerve growth factor-treated PC12 cells. This protein is synthesized in neurons in the central and peripheral nervous system as well as in the pituitary, adrenal medulla, endocrine cells of the stomach, and pancreatic beta cells. VGF is thought to be involved in organism energy balance and regulation of homeostasis as mice lacking this gene show deficits in these areas. More recent results suggest that VGF is upregulated by brain-derived neurotrophic factor (BDNF) and can stimulate the proliferation of hippocampal progenitor cells and produce antidepressant-like behavioral effects, suggesting that this pathway may be a suitable target for therapeutic treatments.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	VGF antibody was raised in rabbits against a 17 amino acid peptide near the carboxy terminus of the human VGF.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. VGF antibody can be used for detection of VGF by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.
Images	Available upon request.
References	Levi A, Eldridge JD, and Paterson BM. Molecular cloning of a gene sequence regulated by nerve growth factor. <i>Science</i> 1985; 229:393-5. Possenti R, Eldridge JD, Paterson BM, et al. A protein induced by NGF in PC12 cells is stored in secretory vesicles and released through the regulatory pathway. <i>EMBO J.</i> 1989; 8:2217-23. Hahm S, Mizuno TM, Wu TJ, et al. Targeted deletion of the Vgf gene indicates that the encoded secretory peptide precursor plays a novel role in the regulation of energy balance. <i>Neuron</i> 1999; 23:537-48. Thakker-Varia S, Krol JJ, Nettleton J, et al. The neuropeptide VGF produces antidepressant-like behavioral effects and enhances proliferation in the hippocampus. <i>J. Neurosci.</i> 2007; 27:12156-67.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4611P; VGF Peptide Cat. No. PK-AB718-1303; Human Brain Tissue Lysate

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