

DESCRIPTION

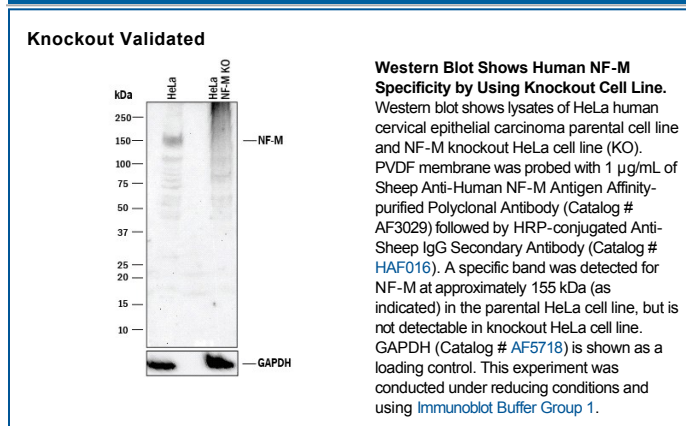
Species Reactivity	Human
Specificity	Detects human NF-M in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human (rh) NF-H and rhNF-L is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human NF-M Ser2-Ser358 Accession # P07197
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human brain (cerebellum and cortex)
Knockout Validated	NF-M is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in NF-M knockout HeLa cell line.	
Western Blot	NF-M is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in NF-M knockout HeLa cell line.	

DATA



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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 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

Human NF-M (neurofilament-medium length) is a 145-150 kDa phosphorylated glycoprotein that belongs to the type IV intermediate filament family. It is 915 amino acids in length and contains a 100 amino acid (aa) N-terminal globular region, a 320 aa α-helical rod, or central region, and a 500 aa globular tail. The rod region contains a series of heptad repeats that contribute to a coiled-coil interaction with an adjacent NF-M molecule, the first step in intermediate filament oligomerization. The C-terminus shows phosphorylation and O-linked glycosylation. Human NF-M aa 2-358, which includes most of the rod region, shares ~98% aa sequence identity with corresponding region of mouse, rat and canine NF-M.