Anti-Norepinephrine Transporter **Antibody**

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Catalog #: 1447-NET

Isotype: IgG_{2b}

Host

Size: 100 ul

Cite this Antibody: PhosphoSolutions Cat# 1447-NET, RRID:AB 2492187

Species Tested

Applications WB 1:2000 Mouse M, R Species Assumed*

Molecular Reference

~55 kDa

Product Description: Protein G purified mouse monoclonal antibody.

Biological Significance: Norepinephrine Transporter [NET] (or noradrenaline transporter (NAT)) is a monoamine transporter that transports the neurotransmitter noradrenaline from the synapse back to its vesicles for storage until later use. It also appears to transport the neurotransmitter dopamine in the same way, but to a lesser degree. Studies have shown a decrease in NET levels in the locus coeruleus in patients diagnosed with major depression (Klimek et al., 1997). Cocaine, amphetamines and many therapeutic antidepressants, such as the SNRIs (Serotonin-norepinephrine reuptake inhibitors) and the tricyclic antidepressants (TCAs) act to raise noradrenaline. Furthermore, deficits in the NET gene have been associated with ADHD (Kim et al., 2006).

Antigen: Synthetic peptide from N-terminal region of mouse norepinephrine transporter.

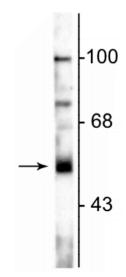
Antibody Specificity: Specific for endogenous levels of the ~55 kDa Norepinephrine Transporter. Shows no reactivity with tissue or cells from NET knock-out mice.

Purification Method: Protein G purified culture supernatant.

Quality Control Tests: Western blots performed on each lot.

Packaging: 100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol.

Storage and Stability: Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.



Western blot of rat cortical lysate showing specific immunolabeling of the ~55 kDa norepinephrine transporter protein.

Product Specific References:

Plummer, N. W., Evsyukova, I. Y., Robertson, S. D., de Marchena, J., Tucker, C. J., & Jensen, P. (2015). Expanding the power of recombinase-based labeling to uncover cellular diversity. *Development*, *142*(24), 4385-4393.

General References:

Klimek V, Stockmeier C, Overholser J, Meltzer HY, Kalka S, Dilley G, Ordway GA (1997) Reduced levels of norepinephrine transporters in the locus coeruleus in major depression. J. Neurosci. 17(21):8451-8458

Kim CH, Hahn MK, Joung Y, Anderson SL, Steele AH, Mazei-Robinson MS, Gizer I, Teicher MH, Cohen BM, Robertson D, Waldman ID, Blakely RD, Kim KS (2006) A Polymorphism in the norepinephrine transporter gene alters promoter activity and is associated with attention-deficit hyperactivity disorder. Proc Nat'l Acad Sci USA 103(50):19164-9.