

Datasheet for ABIN7581983

anti-SLC6A2 antibody (Extracellular)



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Overview

Quantity:	50 µL
Target:	SLC6A2
Binding Specificity:	AA 189-204, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SLC6A2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Noradrenaline Transporter (NET)
Immunogen:	(C)KLLNASVLGDHTKYSK, corresponding to amino acid residues 189-204 of mouse NET
Sequence:	(C)KLLNASVLGD HTKYSK
Isotype:	IgG
Specificity:	2nd extracellular loop
Predicted Reactivity:	Rat - identical, human - 14,16 amino acid residues identical
Characteristics:	Highly specific antibody directed against an epitope of the mouse noradrenaline (norepinephrine) transporter. Anti-Noradrenaline Transporter (NET) (extracellular) Antibody (ABIN7581983) can be used in western blot immunohistochemistry and immunocytochemistry

Product Details

applications. It has been designed to recognize NET from human, mouse and rat samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: SLC6A2

Alternative Name: SLC6A2 ([SLC6A2 Products](#))

Background: Sodium-dependent noradrenaline transporter, Norepinephrine transporter, SLC6A2, Many physiological, endocrine and behavioral functions are determined and regulated by monoamine signaling^{1,2}. Many brain disorders such as depression, drug abuse, schizophrenia, attention deficit hyperactivity disorder (ADHD) are caused by the malfunction of monoaminergic transmission¹⁻³. The intensity of monoaminergic signaling is determined by the availability of the monoamine, which is in turn determined in part by its uptake from the extracellular milieu via monoamine transporters. These transporters include DAT, SERT, and NET, responsible for uptaking dopamine, serotonin and noradrenaline respectively, and recycling them back for release³⁻⁵. While the activity of each transporter is faithful to its neurotransmitter, NET has been shown to clear dopamine in DAT deprived or low DAT regions such as the brain cortex⁶⁻⁸. DAT, SERT and NET are members of the Na⁺/Cl⁻ dependent membrane transporter family which also includes other members. These transporters consist of 12 transmembrane domains and intracellular N- and C-termini. NET also has a significant extracellular loop between transmembrane regions three and four, which contains various glycosylation sites⁹. Like its counterparts, NET's intracellular N- and C-terminal domains are also subject to phosphorylation and protein-protein interactions important for modulating its activity and localization. In addition alternative splicing has also been shown to regulate NET's expression and function¹⁰. NET is specifically expressed on noradrenaline nerve terminals, and is also expressed in the periphery, such as adrenal glands and placenta. NET malfunction is largely associated with attention and mood, as well as various cardiovascular disorders. NET is also a target for psychostimulants such as cocaine and amphetamines which disrupt its function, thereby causing an increase of noradrenaline in synaptic clefts^{3,9}.

Gene ID: 20538

UniProt: [O55192](#)

Application Details

Application Notes: Antigen preadsorption control: 1 µg peptide per 1 µg antibody

Application Details

Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:200
Application Dilutions Western blot wb: 1:400

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C, -20 °C
Storage Comment:	<p>Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C.</p> <p>Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).</p>