Datasheet for ABIN7043805

anti-TACR1 antibody (Extracellular) (FITC)

2 Images

Go to Product page

Overview

Quantity:	50 µL
Target:	TACR1
Binding Specificity:	AA 180-194, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TACR1 antibody is conjugated to FITC
Application:	Live Cell Imaging (LCI), Flow Cytometry (FACS)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Neurokinin 1 Receptor Conjugated to the Fluorescent Dye FITC
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: CMIEWPEHPNRTYEK, corresponding to amino acid residues 180-194 of rat NK1 receptor
Isotype:	IgG
Specificity:	2nd extracellular loop
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse - identical, human - 13,15 amino acid residues identical
Characteristics:	Anti-Neurokinin 1 Receptor (NK1R) (extracellular) Antibody (ABIN7043803, ABIN7045318 and ABIN7045319) is a highly specific antibody directed against an epitope of the rat protein. The

Product Details

	antibody can be used in western blot, indirect live cell flow cytometry, and live cell imaging applications. It has been designed to recognize NK1 from rat, mouse, and human samples. \nAnti-Neurokinin 1 Receptor (NK1R) (extracellular)-FITC Antibody (ABIN7043803, ABIN7045318 and ABIN7045319)-F) is directly conjugated to fluorescein isothiocyanate (FITC). The antibody can be used in immunofluorescent applications such as direct live cell flow cytometry.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	TACR1
Alternative Name:	TACR1 (TACR1 Products)
Background:	NK1 receptor, Tachykinin receptor 1, TACR1, Substance-P receptor, SPR,Substance P (SP), Neurokinin A (NKA) and Neurokinin B (NKB) are all peptides belonging to the Tachykinin protein family. These three peptides which demonstrate a quite heterogeneity in their distribution exert their effect via three receptors: Neurokinin 1-3 receptors, members of the G-protein coupled receptor superfamily. However, Neurokinin 1 Receptor (NK1) preferentially binds Substance P, Neurokinin 2 Receptor (NK2) to NKA and Neurokinin 3 Receptor (NK3) to NKB1.Neurokinin receptors are distinguished by their seven transmembrane domains, an extracellular N-terminus and a cytosolic C-terminal. An unusual property of these receptors is the presence of introns as part of their structural organization1-3. Tachykinin receptors undergo alternative splicing. For example, NK1 is detected with different C-terminal lengths. The longer receptor isoform is found in the brain whereas the truncated form is mostly detected in the periphery1,4.Due to the broad expression profile of tachykinin peptides, their respective receptors are also expressed in a similar fashion. NK1 is widely expressed in neurons endothelial cells, muscle and immune system cells. NK2 is broadly expressed in the periphery and its expression in the brain is quite restricted. NK3 on the other hand is largely expressed in the central nervous system and is also detected in the uterus, skeletal muscle, lung and liver1.Neurokinin receptors have been found in many pathophysiological indications and have therefore become targets for the development of pharmacological compounds. Such indications include cancer, psychological disorders, migraine and various inflammations, just to name a few5-8. Alternative names: Neurokinin 1 Receptor (NK1R), NK1 receptor, Tachykinin receptor 1, TACR1, Substance-P receptor, SPR

Target Details

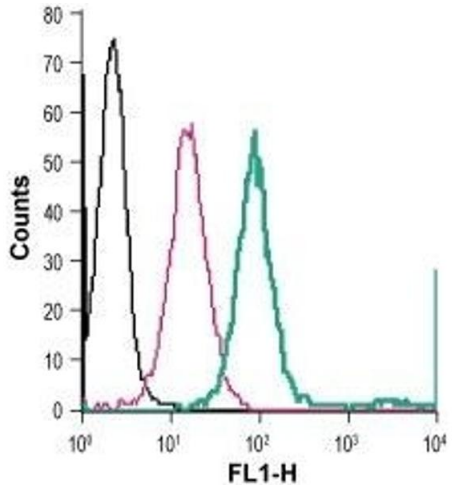
Gene ID:	24807
NCBI Accession:	NM_001058
UniProt:	P14600
Pathways:	Regulation of Systemic Arterial Blood Pressure by Hormones, Feeding Behaviour, Smooth Muscle Cell Migration

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: N/A
Comment:	Negative Control: (ABIN7582044) Blocking Peptide: (ABIN7237370)
Restrictions:	For Research Use only

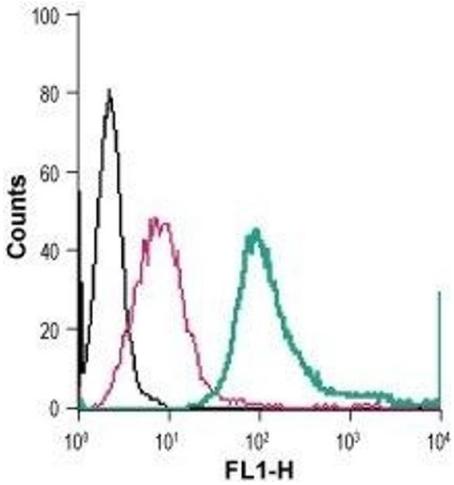
Handling

Format:	Lyophilized
Reconstitution:	50 µL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C, protected from the light, 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).



Flow Cytometry

Image 1. Cell surface detection of NK1R in live intact human THP-1 monocytic leukemia cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-Neurokinin 1 Receptor (NK1R) (extracellular)-FITC Antibody (ABIN7043805, ABIN7045717, ABIN7045718 and ABIN7045719), (2.5 µg).



Flow Cytometry

Image 2. Cell surface detection of NK1R in live intact mouse J774 macrophage cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-Neurokinin 1 Receptor (NK1R) (extracellular)-FITC Antibody (ABIN7043805, ABIN7045717, ABIN7045718 and ABIN7045719), (2.5 µg).