abcam

ab201952

Anti-Somatostatin Receptor 3/SSTR3 antibody [7H8E5]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human SSTR3 aa 1-50. The exact immunogen used to generate this antibody is proprietary information. Database link P32745
Clone number	7H8E5
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Species	Transfected cell lysate - Human
Dilution info	1/500 - 1/2000
Notes	-

Species	Rat
Dilution info	1/500 - 1/2000
Notes	-

Target data

See full target information SSTR3

Function	Receptor for somatostatin-14 and -28. This receptor is coupled via pertussis toxin sensitive G proteins to inhibition of adenylyl cyclase.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Somatostatin Receptor 3 (SSTR3) also known as SS3R or SRIF1C is a G-protein-coupled receptor with an estimated mass of around 45 kDa. This receptor specifically binds the peptide hormone somatostatin leading to a variety of intracellular responses. Located primarily in the central nervous system SSTR3 is particularly concentrated in the hypothalamus and hippocampus though it also appears in peripheral tissues like the pancreas and gastrointestinal tract. The receptor transmits signals that involve inhibition of adenylyl cyclase and activation of phosphotyrosine phosphatases.
Biological function summary	SSTR3 plays an important role in inhibiting the release of several other hormones and neurotransmitters like growth hormone and glucagon which helps regulate endocrine and nervous system activities. It functions as part of a complex system that includes other somatostatin receptors. By interacting with these systems SSTR3 influences processes such as cell proliferation neurotransmission and the modulation of cyclic AMP levels. Due to its inhibitory function the receptor helps maintain balance in hormone secretion and neural activity.
Pathways	SSTR3 receptor signaling integrates into the somatostatin signaling pathway an important process in hormone secretion regulation. It works closely with other receptors like SSTR2 together mediating somatostatin effects throughout the body. The receptor is also involved in the MAPK signaling pathway which has roles in cellular responses to various stimuli. These pathways contribute to its ability to modulate growth apoptosis and neuronal signaling.
Associated diseases and disorders	SSTR3 has associations with neurodegenerative diseases such as Alzheimer's disease due to its role in the central nervous system and neuroprotection. Changes or dysfunctions in SSTR3 expression can influence the progression of these conditions. The receptor's interaction with other proteins like amyloid-beta peptide links it to the pathophysiology of Alzheimer's. Additionally SSTR3 has a role in pituitary adenomas influencing growth hormone secretion patterns. This

involves interaction with growth hormone-releasing hormone highlighting its impact on endocrine disorders.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

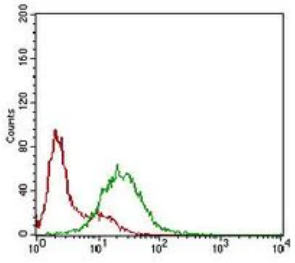
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

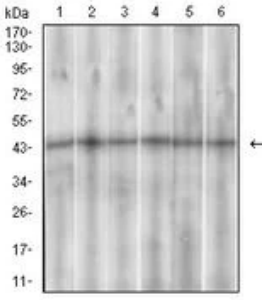
4 product images



Flow Cytometry - Anti-Somatostatin Receptor 3/SSTR3 antibody [7H8E5] (ab201952)

Somatostatin Receptor 3/SSTR3 Flow Cytometry staining using mouse Anti-Somatostatin Receptor 3/SSTR3 antibody

Flow cytometric analysis of Hela cells labeling Smoatostatin Receptor 3 using ab 201952 at 1/200 dilution (green) and negative control (red).



Western blot - Anti-Somatostatin Receptor 3/SSTR3 antibody [7H8E5] (ab201952)

All lanes:
Western blot - Anti-Somatostatin Receptor 3/SSTR3 antibody [7H8E5] (ab201952) at 1/500 dilution

Lane 1:
HeLa cell lysate

Lane 2:
PANC1 cell lysate

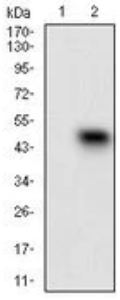
Lane 3:
PC 12 cell lysate

Lane 4:
SK N SH cell lysate

Lane 5:
U937 cell lysate

Lane 6:
HepG2 cell lysate

Predicted band size: 46 kDa



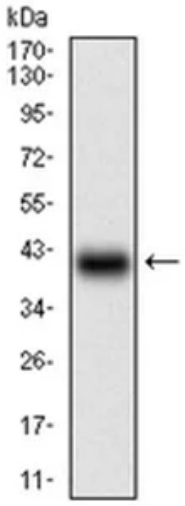
Western blot - Anti-Somatostatin Receptor 3/SSTR3 antibody [7H8E5] (ab201952)

All lanes:
Western blot - Anti-Somatostatin Receptor 3/SSTR3 antibody [7H8E5] (ab201952) at 1/500 dilution

Lane 1:
HEK293 cell lysate

Lane 2:
Human Somatostatin Receptor 3/SSTR3 (AA: 1-43) recombinant protein trasfected HEK293 cell lysate

Predicted band size: 46 kDa



Western blot - Anti-Somatostatin Receptor 3/SSTR3 antibody [7H8E5] (ab201952)

Expected MW is 30.2 kD
All lanes:
Western blot - Anti-Somatostatin Receptor 3/SSTR3 antibody [7H8E5] (ab201952) at 1/500 dilution

All lanes:
Human Somatostatin Receptor 3/SSTR3 (AA: 1-43) recombinant protein

Predicted band size: 46 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.