abcam

ab140665

Anti-Somatostatin antibody [7G5]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human Somatostatin. Database link P61278
Clone number	7G5
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.

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

WB

Tested

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

Expected

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

IHC-P

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

Target data

See full target information Somatostatin

Function	Somatostatin-14. Inhibits the secretion of pituitary hormones, including that of growth hormone/somatotropin (GH1), PRL, ACTH, luteinizing hormone (LH) and TSH. Also impairs ghrelin- and GnRH-stimulated secretion of GH1 and LH; the inhibition of ghrelin-stimulated secretion of GH1 can be further increased by neuronostatin. Neuronostatin. May enhance low-glucose-induced glucagon release by pancreatic alpha cells (By similarity). This effect may be mediated by binding to GPR107 and PKA activation (By similarity). May regulate cardiac contractile function (By similarity). May compromise cardiomyocyte viability (By similarity). In the central nervous system, may impair memory retention and may affect hippocampal excitability (By similarity). May also have anxiolytic and anorexigenic effects (By similarity). May play a role in arterial pressure regulation (By similarity). May inhibit basal, but not ghrelin- or GnRH-stimulated secretion of GH1 or LH, but does not affect the release of other pituitary hormones, including PRL, ACTH, FSH or TSH. Potentiates inhibitory action of somatostatin on ghrelin-stimulated secretion of GH1, but not that on GnRH-stimulated secretion of LH (PubMed:29615476).

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

Supplementary info

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

Activity summary	Somatostatin also known as growth hormone-inhibiting hormone (GHIH) is a peptide hormone with a molecular mass around 3200 Daltons. This protein is expressed mainly in the central nervous system including the hypothalamus as well as in the pancreas and gastrointestinal tract. Somatostatin consists of two biologically active forms: one with 14 amino acids and another with 28 amino acids. This target exerts its mechanical function by binding to specific G-protein-coupled somatostatin receptors leading to inhibition of various signaling pathways.
Biological function summary	Somatostatin regulates the endocrine system and affects neurotransmission and cell proliferation. It inhibits the secretion of several hormones such as growth hormone thyroid-stimulating hormone and insulin. Somatostatin also plays a role in reducing gastric acid secretion and slowing down gastrointestinal motility. While

	somatostatin does not act as part of a larger complex its action is highly localized in the tissues where it is produced and released.
Pathways	Somatostatin acts significantly in both the growth hormone and insulin signaling pathways. In the growth hormone pathway it serves as a counter-regulatory hormone to growth hormone-releasing hormone (GHRH) therefore controlling growth hormone levels. In the insulin signaling pathway somatostatin interacts with insulin and glucagon modulating glucose metabolism. It is also related to other proteins like cortistatin which shares similar functions and can bind to the same receptors.
Associated diseases and disorders	Somatostatin is linked with conditions such as acromegaly and diabetes. In acromegaly excessive growth hormone production occurs due to reduced somatostatin activity making somatostatin analogs a therapeutic option. Meanwhile in diabetes altered somatostatin levels can influence insulin and glucagon balance affecting glucose homeostasis. Somatostatin's interaction with its receptors and proteins like insulin plays an important role in the management of these conditions.

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

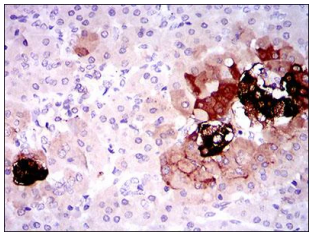
We do not recommend this combination. It is not covered by our product promise.

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.

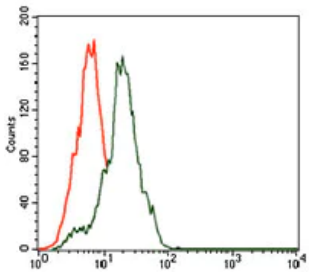
4 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Somatostatin antibody [7G5] (ab140665)

Somatostatin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Somatostatin antibody

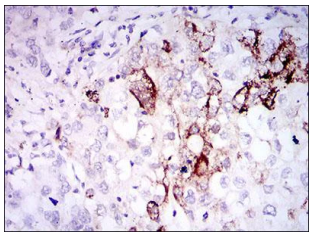
Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labeling Somatostatin with ab140665 at a 1/200 dilution followed by DAB staining.



Flow Cytometry - Anti-Somatostatin antibody [7G5] (ab140665)

Somatostatin Flow Cytometry staining using mouse Anti-Somatostatin antibody

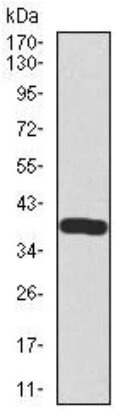
Flow cytometric analysis of HepG2 cells labelling Somatostatin with ab140665 at 1/200 dilution (green); negative control (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Somatostatin antibody [7G5] (ab140665)

Somatostatin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Somatostatin antibody

Immunohistochemical analysis of paraffin-embedded Human lung cancer tissue labeling Somatostatin with ab140665 at a 1/200 dilution followed by DAB staining.



Western blot - Anti-Somatostatin antibody [7G5] (ab140665)

Expected MW is 38.2 kDa.
All lanes:
Western blot - Anti-Somatostatin antibody [7G5] (ab140665) at 1/500 dilution

All lanes:
Somatostatin recombinant protein

Predicted band size: 13 kDa

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