# Serotonin (2Q116): sc-73025



The Power to Question

### **BACKGROUND**

Serotonin (5-hydroxytryptamine, or 5-HT) is a monoamine neurotransmitter that is made in serotonergic neurons in the central nervous system (CNS) and in enterochromaffin cells in the gastrointestinal tract. Neurons of the Raphe nuclei are the main source of Serotonin, and its action is terminated primarily via uptake of Serotonin from the synapse. In the CNS, Serotonin is important in the regulation of mood, sleep, vomiting, sexuality and appetite. Low levels of Serotonin are commonly associated with several disorders such as depression, migraines, bipolar disorder and anxiety. Several agents can inhibit Serotonin reuptake including MDMA, cocaine, tricyclic antidepressants and selective Serotonin reuptake inhibitors (SSRIs).

## **REFERENCES**

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# SOURCE

Serotonin (20116) is a rat monoclonal antibody raised against Serotonin (5-HT) conjugated to BSA.

#### **PRODUCT**

Each vial contains 50  $\mu l$  culture supernatant containing  $lgG_{2c}$  in a total volume of 100  $\mu l$  containing PBS, with <0.01% sodium azide, and < 0.025% thimerosal.

## **APPLICATIONS**

Serotonin (20116) is recommended for detection of Serotonin containing cell bodies and terminals in the central and peripheral nervous systems of broad mammalian origin by immunofluorescence and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:50-1:500); non cross-reactive with catecholamine rich neurons in formaldehyde fixed tissue sections. May cross-react with dopamine, tryptamine and methoxytryptamine in liquid media tests, and carcinoid tumours.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-rat IgG-FITC: sc-2011 (dilution range: 1:100-1:400) or goat anti-rat IgG-TR: sc-2782 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 2) Immunohistochemistry: use ABC: sc-2019 rat IgG Staining System.

### **STORAGE**

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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