

ARG-Vasopressin (VAS 12-2-2): sc-73505

BACKGROUND

ARG-Vasopressin, a processed active peptide cleaved from its precursor, is an antidiuretic, neurohypophyseal hormone involved with body fluid homeostasis and is believed to act as an autocrine growth factor in certain cancers, such as breast cancer. The many forms of the ARG-Vasopressin precursor have been found in SKBR3 and MCF7 cells, both at the cell surface and in secreted form. Excessive ARG-Vasopressin secretion, regulated by specific and highly sensitive hypothalamic osmoreceptors, increases mean arterial pressure, systemic vascular resistance and stroke volume index via Vasopressin V1a- and V2-mediated effects on the peripheral vasculature and on water retention. Myocardial function may be directly and adversely affected by ARG-Vasopressin through V1a activation on myocardial contractility and cell growth. A V1-type receptor-mediated pathway caused by ARG-Vasopressin has also proven to promote cancer growth through ERK1/2 activation. The antidiuretic action of ARG-Vasopressin is regulated by the Vasopressin V2 receptor. ARG-Vasopressin may also keep migraines in remission, as it promotes anti-nociception and influences vasomotor and behavior control. These factors make ARG-Vasopressin a target for therapy in both acute and chronic heart failure.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AVP (human) mapping to 20p13.

SOURCE

ARG-Vasopressin (VAS 12-2-2) is a mouse monoclonal antibody raised against synthetic ARG-Vasopressin of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of TBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ARG-Vasopressin (VAS 12-2-2) is recommended for detection of ARG-Vasopressin of human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ARG-Vasopressin siRNA (h): sc-45291, ARG-Vasopressin shRNA Plasmid (h): sc-45291-SH and ARG-Vasopressin shRNA (h) Lentiviral Particles: sc-45291-V.

Molecular Weight (predicted) of ARG-Vasopressin: 17 kDa.

Molecular Weight (observed) of ARG-Vasopressin: 33 kDa.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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