

ARG30154 Suprachiasmatic Nuclei (SCN) Marker Antibody Duo

Package: 1 pair
Store at: -20°C

Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG62658	anti-VIP antibody	Rabbit pAb	Hu, Ms, Rat	ICC/IF, IP	100 µl
ARG54643	anti-Vasopressin antibody	Rabbit pAb	Hu, Ms, Rat, Rb, Sheep	ICC/IF, IHC-P, RIA, WB	25 µl

Summary

Product Description	Suprachiasmatic nuclei (SCN) is a tiny structure in the hypothalamus responsible for the regulation of circadian rhythms in an organism. There are several cell types in the SCN and contain two main types of peptide hormones including Vasopressin (AVP) and Vasoactive Intestinal Peptide (VIP). Expression of arginine vasopressin (AVP) and vasoactive intestinal peptide (VIP) divide the nucleus into two subdivisions, termed dorsomedial/shell and ventrolateral/core, respectively. Although these gross divisions do not necessarily reflect differences in cellular properties, these areas have been shown to differ in their projection patterns, innervation and rhythmicity. arigo provides SCN Marker Duo consists of VIP and AVP antibodies for the identification of SCN structure in the brain. Clark DD et al. (2013). J Biol. Rhythms 28: 15-25 Leak and Moore. (2001). J Comp Neurol 433: 312-334
Target Name	Suprachiasmatic Nuclei (SCN) Marker
Alternate Names	Suprachiasmatic Nuclei (SCN) Marker antibody; Suprachiasmatic Nuclei Marker antibody; SCN Marker antibody; Vasopressin antibody; VIP antibody

Properties

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Full Name	Suprachiasmatic Nuclei (SCN) Marker Antibody Duo
Background	VIP protein belongs to the glucagon family. It stimulates myocardial contractility, causes vasodilation, increases glycogenolysis, lowers arterial blood pressure and relaxes the smooth muscle of trachea, stomach and gall bladder. The protein also acts as an antimicrobial peptide with antibacterial and antifungal activity. Alternative splicing occurs at this locus and two transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Nov 2014] Arginine vasopressin (AVP), also known as vasopressin, argipressin or antidiuretic hormone (ADH), is a hormone found in most mammals, including humans. Vasopressin is a peptide hormone that controls the reabsorption of molecules in the tubules of the kidneys by affecting the tissue's permeability. It also increases peripheral vascular resistance, which in turn increases arterial blood pressure. It plays a key role in homeostasis, and the regulation of water, glucose, and salts in the blood. It is derived from a prehormone precursor that is synthesized in the hypothalamus and stored in vesicles at the posterior pituitary. Most of it is stored in the posterior pituitary to be released into the bloodstream.

However, some AVP is also released directly into the brain.

Function

VIP causes vasodilation, lowers arterial blood pressure, stimulates myocardial contractility, increases glycogenolysis and relaxes the smooth muscle of trachea, stomach and gall bladder. PHM and PHV also cause vasodilation. PHM-27 is a potent agonist of the calcitonin receptor CALCR, with similar efficacy as calcitonin. [UniProt]

Neurophysin 2 specifically binds vasopressin. Vasopressin has a direct antidiuretic action on the kidney, it also causes vasoconstriction of the peripheral vessels. [UniProt]

Research Area

Neuroscience antibody; Signaling Transduction antibody