



## Human AVP peptide (DAG-P1302)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

#### Antigen Description

This gene encodes a precursor protein consisting of arginine vasopressin and two associated proteins, neurophysin 2 and a glycopeptide, copeptin. Arginine vasopressin is a posterior pituitary hormone which is synthesized in the supraoptic nucleus and paraventricular nucleus of the hypothalamus. Along with its carrier protein, neurophysin 2, it is packaged into neurosecretory vesicles and transported axonally to the nerve endings in the neurohypophysis where it is either stored or secreted into the bloodstream. The precursor is thought to be activated while it is being transported along the axon to the posterior pituitary. Arginine vasopressin acts as a growth factor by enhancing pH regulation through acid-base transport systems. It has a direct antidiuretic action on the kidney, and also causes vasoconstriction of the peripheral vessels. This hormone can contract smooth muscle during parturition and lactation. It is also involved in cognition, tolerance, adaptation and complex sexual and maternal behaviour, as well as in the regulation of water excretion and cardiovascular functions. Mutations in this gene cause autosomal dominant neurohypophyseal diabetes insipidus (ADNDI). [provided by RefSeq, Mar 2010]

<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

### GENE INFORMATION

**Gene Name** [AVP arginine vasopressin \[ Homo sapiens \(human\) \]](#)

**Official Symbol** AVP

<b>Synonyms</b>	AVP; arginine vasopressin; VP; ADH; ARVP; AVRP; AVP-NP II; vasopressin-neurophysin 2-copeptin; neurohypophyseal; prepro-AVP-NP II; antidiuretic hormone; vasopressin-neurophysin II-copeptin; prepro-arginine-vasopressin-neurophysin II;
<b>Entrez Gene ID</b>	<a href="#">551</a>
<b>mRNA Refseq</b>	<a href="#">NM_000490.4</a>
<b>Protein Refseq</b>	<a href="#">NP_000481.2</a>
<b>UniProt ID</b>	P01185
<b>Chromosome Location</b>	20p13
<b>Pathway</b>	Aquaporin-mediated transport, organism-specific biosystem; BMAL1:CLOCK/NPAS2 Activates Circadian Expression, organism-specific biosystem; Circadian Clock, organism-specific biosystem; Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; G alpha (q) signalling events, organism-specific biosystem; G alpha (s) signalling events, organism-specific biosystem; GPCR downstream signaling, organism-specific biosystem; GPCR ligand binding, organism-specific biosystem; Gastrin-CREB signalling
<b>Function</b>	V1A vasopressin receptor binding; V1B vasopressin receptor binding; cysteine-type endopeptidase inhibitor activity involved in apoptotic process; neurohypophyseal hormone activity; neuropeptide hormone activity; protein kinase activity; receptor binding;