

## **Product datasheet for PH316816**

## OriGene Technologies, Inc.

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## Vasopressin (AVP) (NM\_000490) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** AVP MS Standard C13 and N15-labeled recombinant protein (NP\_000481)

Species:HumanExpression Host:HEK293

Expression cDNA Clone

RC216816

or AA Sequence:

**Predicted MW:** 17.32 kDa

Protein Sequence: >RC216816 representing NM\_000490

Red=Cloning site Green=Tags(s)

MPDTMLPACFLGLLAFSSACYFQNCPRGGKRAMSDLELRQCLPCGPGGKGRCFGPSICCADELGCFVGTA EALRCQEENYLPSPCQSGQKACGSGGRCAAFGVCCNDESCVTEPECREGFHRRARASDRSNATQLDGPAG

ALLLRLVQLAGAPEPFEPAQPDAY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

**Storage:** Store at -80°C. Avoid repeated freeze-thaw cycles.

**Stability:** Stable for 3 months from receipt of products under proper storage and handling conditions.

**RefSeq:** NP 000481

RefSeq Size: 633 RefSeq ORF: 492

Synonyms: ADH; ARVP; AVP-NPII; AVRP; VP

Locus ID: 551

**UniProt ID:** <u>P01185</u>, <u>X5DQP6</u>





Cytogenetics:

20p13

**Summary:** 

This gene encodes a member of the vasopressin/oxytocin family and preproprotein that is proteolytically processed to generate multiple protein products. These products include the neuropeptide hormone arginine vasopressin, and two other peptides, neurophysin 2 and copeptin. Arginine vasopressin is a posterior pituitary hormone that 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). This gene is present in a gene cluster with the related gene oxytocin on chromosome 20. [provided by RefSeq, Nov 2015]

**Protein Families:** Druggable Genome, Secreted Protein

## **Product images:**



Coomassie blue staining of purified AVP protein (Cat# [TP316816]). The protein was produced from HEK293T cells transfected with AVP cDNA clone (Cat# [RC216816]) using MegaTran 2.0 (Cat# [TT210002]).