



# Recombinant Rat Vasopressin-neurophysin 2-copeptin (Avp)

<b>Product Code</b>	CSB-EP002466RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P01186
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	ATSDM ELRQCLPCGP GGKGRCFGPS ICCADELGCF LGTAEALRCQ EENYLPSPCQ SGQKPCGSGG RCAAAGICCS DESCVAEPEC REGFFRLT
<b>Source</b>	E.coli
<b>Target Names</b>	Avp
<b>Protein Names</b>	Recommended name: Vasopressin-neurophysin 2-copeptin Alternative name(s): AVP-NPII Cleaved into the following 3 chains: 1. Arg-vasopressin Alternative name(s): Arginine-vasopressin Neurophysin 2 Alternative name(s): Neurophysin-I
<b>Expression Region</b>	36-128
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	This gene encodes a precursor protein consisting of arginine vasopressin and two associated proteins, neurophysin II 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 II, 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).
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

---

**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.