

## PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



### EP2 (Q299) Peptide

Cat No.: BS2598P

#### Background

Prostaglandin E2, a member of the autacoid family of lipid mediators, is a major renal cyclooxygenase product of arachidonic acid metabolism. Prostaglandin E2 binds to four G protein-coupled E-prostanoid receptors, designated EP1, EP2, EP3 and EP4. The expression and function of the prostaglandin E2 receptors have been highly characterized in kidney. EP1, which is predominantly expressed in the collecting duct, couples to Gq proteins to inhibit sodium absorption and increase in intracellular calcium, which act as second messengers. EP2 is coupled to Gs proteins, which stimulate adenylyl cyclase. EP2 has the lowest expression in kidney, but EP2 knockout mice exhibit salt-sensitive hypertension, which suggests a role for EP2 in salt excretion. EP3 is expressed in renal vessels, thick ascending limb and collecting duct. EP3 has at least 6 alternative splice variants that couple to Gi proteins to inhibit cAMP, which subsequently inhibit sodium and water transport.

#### Swiss-Prot

P43116

#### Applications

#### Blocking

#### Specificity

This peptide can be used with studies using BS2598 EP2 (Q299) pAb.

#### Purification & Purity

Synthetic peptide EP2 (Q299). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### Product

1 mg/ml in DI water.

#### Storage & Stability

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

#### Research Use

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