

## PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



### NOX4 Peptide

Cat No.: BS60435P

#### Background

The superoxide-generating NADPH oxidase includes a membrane-bound flavocytochrome containing two subunits, gp91-phox and p22-phox, and the cytosolic proteins p47-phox and p67-phox. During activation of the NADPH oxidase, p47-phox and p67-phox migrate to the plasma membrane where they associate with the flavocytochrome, cytochrome b558, to form the active enzyme complex. The p22 and gp91-phox subunits also function as surface O<sub>2</sub> sensors that initiate cellular signaling in response to hypoxic conditions. Nox4 (also known as Renox) is a renal gp91-phox homolog highly expressed at the site of erythropoietin production in the proximal convoluted tubule epithelial cells of the renal cortex. Nox4 is also expressed in fetal tissues, placenta, glioblastoma and vascular cells. Like gp91-phox, the enzymatic activity of Nox4 produces superoxide anions. In vascular cells, the addition of Angiotensin II increases Nox4 expression, which suggests a role for Nox4 in vascular oxidative stress response. The gene encoding human Nox4 maps to chromosome 11q14.2-q21.

#### Swiss-Prot

Q9NPH5

#### Applications

Blocking

#### Specificity

This peptide can be used with studies using BS60435 NOX4 pAb.

#### Purification & Purity

Synthetic peptide NOX4. (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.