

## PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



### p-ERK1/2 (T202/Y204) Peptide

Cat No.: BS5016P

#### Background

The activation of signal transduction pathways by growth factors, hormones and neurotransmitters is mediated through two closely related MAP kinases, p44 and p42, designated extracellular-signal related kinase 1 (ERK 1) and ERK 2, respectively. ERK proteins are regulated by dual phosphorylation at Tyrosine 204 and 187 and Threonine 177 and 160 residues mapping within a characteristic Thr-Glu-Tyr motif. Phosphorylation at both the Threonine 202 and Tyrosine 204 residues of ERK 1 and Threonine 185 and Tyrosine 187 residues of ERK 2 is required for full enzymatic activation. The structural consequences of dual phosphorylation in ERK 2 include active site closure, alignment of key catalytic residues that interact with ATP, and remodeling of the activation loop. In response to activation, MAP kinases phosphorylate downstream components on serine and threonine. Upstream MAP kinase regulators include MAP kinase kinase (MEK), MEK kinase and Raf-1. The ERK family has three additional members: ERK 3, ERK 5 and ERK 6.

#### Swiss-Prot

P27361/P28482

#### Applications

Blocking

#### Specificity

This peptide can be used with studies using BS5016 p-ERK1/2 (T202/Y204) pAb.

#### Purification & Purity

Synthetic peptide p-ERK1/2 (T202/Y204). (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.

Bioworld Technology, Inc.  
1660 South Highway 100, Suite 500 St. Louis Park, MN  
55416, USA. Email: [info@bioworld.com](mailto:info@bioworld.com)  
Tel: 6123263284 Fax: 6122933841

Bioworld technology, co, Ltd.  
No 9, weidi road Qixia District Nanjing, 210046,  
P, R.China. Email: [info@biogot.com](mailto:info@biogot.com)  
Tel: +86-025-68037686 Fax: +86-025-68035151