

## PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



### p-ACC $\alpha$ (S80) Peptide

Cat No.: BS4210P

#### Background

Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the ratelimiting step in fatty acid synthesis. Exercise diminishes the activity of acetyl- CoA carboxylase in human muscle. ACC $\alpha$  (ACC1) is the rate-limiting enzyme in the biogenesis of long-chain fatty acids, and ACC $\beta$  (ACC2) may control mitochondrial fatty acid oxidation. These two isoforms of ACC control the amount of fatty acids in the cells. The catalytic function of ACC $\alpha$  is regulated by phosphorylation (inactive) and dephosphorylation (active) of targeted Serine residues and by allosteric transformation by citrate or palmitoyl-CoA, which serve as the short-term regulatory mechanism of the enzyme. The gene encoding ACC  $\alpha$ , which maps to human chromosome 17, encodes the 265 kDa  $\alpha$  form of ACC, which is the major ACC in lipogenic tissues. The catalytic core of ACC $\beta$  is homologous to that of ACC $\alpha$  except for an additional peptide of about 150 amino acids at the N-terminus.

#### Swiss-Prot

Q13085

#### Applications

Blocking

#### Specificity

This peptide can be used with studies using BS4210 p-ACC $\alpha$  (S80) pAb.

#### Purification & Purity

Synthetic peptide p-ACC $\alpha$  (S80). (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.