

Cat # RP-873

Recombinant Human S100P

**Size:** 10 ug

S100P was originally described as a placental protein of 95 amino acid residues shares about 50% sequence identity with the brain S100 proteins alpha and beta. S100 proteins are small dimeric members of the EF-hand superfamily of Ca(2+) binding proteins thought to participate in mediating intracellular Ca(2+) signals by binding to and thereby regulating target proteins in a Ca(2+)-dependent manner. S100P in addition to binding Ca2+, also binds Zn2+ and Mg2+. S100P gene is located on chromosome 4p16. S100P is dysregulated in the androgen-independent prostate cancer cell lines LNCaP-R, DU145, and PC3 and may play a role in the etiology of prostate cancer. In ductal hyperplasias, in situ and invasive ductal carcinoma, but not in the normal tissues, S100P overexpression is an early event that might play an important role in the immortalization of human breast epithelial cells in vitro and tumor progression in vivo.

#### **SOURCE:**

The Recombinant Human S100P has a molecular mass of 10.4 kDa containing 95 amino acid residues of the human S100P. Sterile filtered and lyophilized from 0.5 mg/ml in 0.05M Phosphate buffer pH7.2, 0.1M NaCl.

#### **APPLICATION AND SUGGESTED DILUTIONS:**

Western blotting. Greater than 95% as determined by SDS-PAGE. Users must optimize the appropriate concentration and conditions for each assay.

#### **STORAGE & STABILITY:**

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C. The lyophilized protein remains stable until the expiry date when stored at -20°C. Add 0.2 ml of deionized H2O and let the lyophilized pellet dissolve completely.

#### **USAGE:**

This item is for LABORATORY RESEARCH USE ONLY.

RP-873            101011V