PRODUCT INFORMATION

Expression system E.coli

Domain 1-89aa

UniProt No. P14069

NCBI Accession No. NP_035443

Alternative Names S100 calcium binding protein A6 (calcyclin), 2A9, 5B10, Cacy, CALCYCLIN, PRA

PRODUCT SPECIFICATION

Molecular Weight 12.2 kDa (109aa) confirmed by MALDI-TOF

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 30% glycerol, 100mM NaCl

Purity > 95% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

S100 calcium binding protein A6 (S100A6) belongs to the S100 family. S100 family is containing 2 EF-hand calcium-binding motifs. S100 proteins regulate a number of cellular processes such as cell cycle progressions and differentiation. S100A6 plays a role in the reorganization of the actin cytoskeleton and in cell mobility. This is a specific target of S-100B protein in vivo. The binding of S100A6 to S100B is stabilized by S100B-bound calcium and zinc. It associates with both Annexin XI and CacyBP (Calcyclin-binding protein). It functions to activate several processes along the calcium signal transduction pathway including the regulation of cell growth,



proliferation, secretion and exocytosis. Recombinant mouse S100A6 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MACPLDQAIG LLVAIFHKYS GKEGDKHTLS KKELKELIQK ELTIGSKLQD AEIARLMDDL DRNKDQEVNF QEYVAFLGAL ALIYNEALK

General References

Filipek A., et al. (1991) Eur. J. Biochem. 195:795-800 Yamashita, N., et al. (1999) J. Comp. Neurol. 404:235-257.

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

