

## 32-4760: Recombinant Human S100 Calcium Binding Protein G

**Alternative Name :** Protein S100-G, Calbindin-D9k, S100 calcium-binding protein G, Vitamin D-dependent calcium-binding protein intestinal, CABP, S100G, CABP9K, CALB3, S100D, CABP1, MGC138379.

### Description

Source : Escherichia Coli. The Recombinant Human S100G produced in E.coli has a molecular mass of 10.04kDa containing 87 amino acid residues of the human S100G and fused to a 9 a.a. His tag at N-terminus. S100G (calbindin D9K) is a vitamin D-dependent calcium-binding protein. S100G, which is a cytosolic protein, is a member of a family of calcium-binding proteins that includes calmodulin, parvalbumin, troponin C, and S100 protein. In the intestine, S100G is vitamin D-dependent and its expression correlates with calcium transport activity. S100G may increase  $\text{Ca}^{2+}$  absorption by buffering  $\text{Ca}^{2+}$  in the cytoplasm and increase ATP-dependent  $\text{Ca}^{2+}$  transport in duodenal basolateral membrane vesicles.

### Product Info

**Amount :** 10  $\mu\text{g}$   
**Content :** S100G was filtered (0.4 $\mu\text{m}$ ) and lyophilized in 0.5 mg/ml in 20mM Tris and 50mM NaCl, pH 7.5.  
**Storage condition :** 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.  
**Amino Acid :** MKHHHHHHAS TKKSPEELKRS TKKSPEELKR IFEKYAAKEG DPDQLSKDEL KLLIQAEFPS LLKGPNTLDD LFQELDKNGD GEVSFEFQV LVKKISQ.

### Application Note

It is recommended to add deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

