Recombinant Bovine S100 Calcium Binding Protein G, Ca2+

Cat. No. S100G-162B **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human Calbindin D9K was cloned from bovine cDNA and expressed in*E.coli*. It bounds to one Ca and one Ln ion. Two calcium ions are bound in the Calbindin D9K version. The protein consists of Calbindin D9K, mutant P47M (residues 5-79, swissprot accession P02633). MW = 8.5 kDa.
Species	Bovine
Source	E.coli
ProteinLength	5-79 a.a.
Description	Protein S100-G is aproteinthat in humans is encoded by the S100Ggene. This gene en codes calbindin D9K, a vitamin D-dependent calcium-binding protein. This cytosolic pr otein belongs to a family of calcium-binding proteins that includes calmodulin, parvalb umin, troponin C, and S100 protein. In the intestine, the protein is vitamin D-depende nt and its expression correlates with calcium transport activity. The protein may increa seCa2+absorption by buffering Ca2+ in the cytoplasm and increase ATP-dependent Ca2+ transport in duodenal basolateral membrane vesicles.
Purity	> 95% by SDS-PAGE. The protein was observed as a single band migrating at molecular weight <10 kDa.
Supplied As	solution in water pH 6. The concentration is calculated from the absorbance at 280nm (e280 = 1280 M-1 cm-1).

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Characteristics	Under the above described conditions, to avoid precipitation or protein dimerization, the product can be concentrated to a maximum of 2mM.
Storage	-20ºC. The protein is stable at 4ºC for months and at 25 ºC for at least several weeks. After initial defrost, aliquot product into individual tubes and refreeze at -20ºC. Avoid repeated freeze/defrost cycles.

GENE INFORMATION

Gene Name	S100G S100 calcium binding protein G [Bos taurus]
Synonyms	S100G; S100 Calcium Binding Protein G; S100G; CABP; CALB3; S100D
Gene ID	281658
mRNA Refseq	NM_174257
Protein Refseq	NP_776682
UniProt ID	P02633

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