## PRODUCT INFORMATION

## Expression system

E.coli

## Domain

1-238aa
UniProt No.
P17677
NCBI Accession No.
NP_002036.1

## Alternative Names

Growth associated protein 43, Neuromodulin, B-50, PP46

## PRODUCT SPECIFICATION

## Molecular Weight

27.3 kDa (262aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

## Concentration

$0.5 \mathrm{mg} / \mathrm{ml}$ (determined by BCA assay)

## Formulation

Liquid in. 20 mM Tris-HCl buffer (pH 8.0) containing $0.1 \mathrm{M} \mathrm{NaCl}, 10 \%$ glycerol

## Purity

> 90\% by SDS-PAGE

## Tag

His-Tag

## Application

SDS-PAGE

## Storage Condition

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

## BACKGROUND

## Description

Growth associated protein 43, also known as GAP43, is a phosphoprotein of the presynaptic membrane involved in synaptic reorganization and neural development. It is present at high levels in neuronal growth cones during development and axonal regeneration. GAP43 is normally produced by neurons during developmental growth and axonal regeneration, but it is also expressed in specific regions of the normal adult nervous system. Also, GAP43 plays an essential role in the maintenance mechanism of long-term potentiation (LTP). Recombinant human GAP43 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 MGSH>MLCCMR RTKQVEKNDD DQKIEQDGIK PEDKAHKAAT KIQASFRGHI TRKKLKGEKK DDVQAAEAEA NKKDEAPVAD GVEKKGEGTT TAEAAPATGS KPDEPGKAGE TPSEEKKGEG DAATEQAAPQ APASSEEKAG SAETESATKA STDNSPSSKA EDAPAKEEPK QADVPAAVTA AAATTPAAED AAAKATAQPP TETGESSQAE ENIEAVDETK PKESARQDEG KEEEPEADQE HA

## General References

Dent E W., et al. (1998) J Neurobiol. 35:287-299.
Neve R L., et al. (1998) J Neurosci. 18: 7757-7767.

## DATA

## SDS-PAGE



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

