PRODUCT INFORMATION

Expression system E.coli

Domain 1-210aa

UniProt No. Q9UGC6

NCBI Accession No. NP_036551

Alternative Names Regulator of G-protein signaling 17, hRGS17, RGS-17, RGSZ2

PRODUCT SPECIFICATION

Molecular Weight

26.5 kDa (230aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

Concentration 1mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.1M NaCl,1mM DTT

Purity > 90% 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

RGS17, also known as regulator of G-protein signaling 17, attenuates the signaling activity of G-proteins by binding to activated, GTP-bound G alpha subunits and acting as a GTPase activating protein (GAP), increasing the rate of conversion of the GTP to GDP. This hydrolysis allows the G alpha subunits to bind G beta/gamma subunit heterodimers, forming inactive G-protein heterotrimers, thereby terminating the signal. It plays an important role in termination of signalling by mu opioid receptors and development of tolerance to opioid analgesic drugs. Recombinant human RGS17 protein, fused to His-tag at N-terminus, was expressed in E. coli



and purified by using conventional chromatography.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MRKRQQSQNE GTPAVSQAPG NQRPNNTCCF CWCCCCSCSC LTVRNEERGE NAGRPTHTTK MESIQVLEEC QNPTAEEVLS WSQNFDKMMK APAGRNLFRE FLRTEYSEEN LLFWLACEDL KKEQNKKVIE EKARMIYEDY ISILSPKEVS LDSRVREVIN RNLLDPNPHM YEDAQLQIYT LMHRDSFPRF LNSQIYKSFV ESTAGSSSES

General References

Sierra D.A. et al. (2002) Genomics 79: 177-185. Mao H. et al. (2004) J. Biol. Chem. 279: 26314-26322.

DATA



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

