Human ING5 Protein (GST Tag)

Catalog Number: **13917-H09E**

General Information

Gene Name Synonym:

p28ING5

Protein Construction:

A DNA sequence encoding the mature form of human ING5 (Q8WYH8-2) (Glu36-Gln84) was fused with the GST tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human ING5 /GST chimera consists of 283 amino acids and has a predicted molecular mass of 32.9 kDa. It migrates as an approximately 33 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

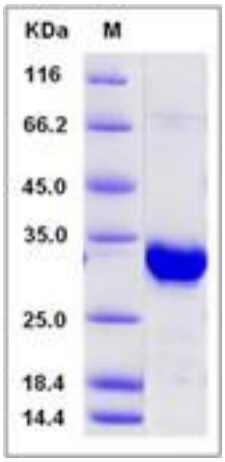
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

ING5 belongs to the ING family. It contains 1 PHD-type zinc finger and is a component of the HBO1 complex. HBO1 complex has a histone H4-specific acetyltransferase activity, a reduced activity toward histone H3 and is responsible for the bulk of histone H4 acetylation in vivo. HBO1 complex composed at least of ING4 or ING5, KAT7/HBO1, MEAF6, and one of PHF15, PHF16 and PHF17. ING5 also is a component of the MOZ/MORF complex which is composed at least of ING5, KAT6A, KAT6B, MEAF6 and one of BRPF1, BRD1/BRPF2 and BRPF3. It interacts with EP300 and TP53. MOZ/MORF complex has a histone H3 acetyltransferase activity. Through chromatin acetylation ING5 may regulate DNA replication and may function as a transcriptional coactivator. It interacts with H3K4me3 and to a lesser extent with H3K4me2. ING5 is similar to ING1, a tumor suppressor protein that can interact with TP53, inhibit cell growth, and induce apoptosis. It can bind TP EP300/p300, a component of the histone acetyl transferase complex, suggesting its involvement in TP53-dependent regulatory pathway.

References

1.Zhang F, *et al.* (2011) The inhibitor of growth protein 5 (ING5) depends on INCA1 as a co-factor for its antiproliferative effects. PLoS One. (7):e21505. 2.Zheng HC, *et al.* (2011) The nuclear to cytoplasmic shift of ING5 protein during colorectal carcinogenesis with their distinct links to pathologic behaviors of carcinomas. Hum Pathol. 42(3):424-33. 3.Xing YN, *et al.* (2011) The altered expression of ING5 protein is involved in gastric carcinogenesis and subsequent progression. Hum Pathol. 42(1):25-35.