Rat FAS / CD95 / APO-1 / TNFRSF6 Protein (His Tag)

Catalog Number: **80043-R08H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

ALPS1A; APO-1; APT1; CD95; FAS1; FASTM; TNFRSF6; AI196731; APO1; APT1; CD95; lpr; TNFR6; Tnfrsf6

Protein Construction:

A DNA sequence encoding the rat FAS (NP_631933.2) extracellular domain (Met 1-Lys 170) was fused with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to inhibit Fas Ligand induced apoptosis of Jurkat human acute T cell leukemia cells. The ED_{50} for this effect is typically 2-10 μg/mL in the presence of 20 ng/mL recombinant human Fas ligand.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

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

Predicted N terminal: Gln 22

Molecular Mass:

The recombinant rat FAS comprises 160 amino acids and predicts a molecular mass of 18 kDa. As a result of glycosylation, the apparent molecular mass of the rat FAS is approximately 30-35 kDa 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:

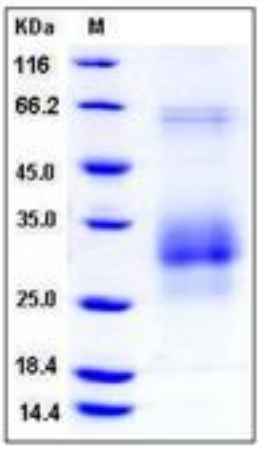
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CD95 (APO-1/Fas) is an important inducer of the extrinsic apoptosis signaling pathway and therapy induced apoptosis of many tumor cells has been linked to the activity of CD95. is a prototype death receptor characterized by the presence of an 80 amino acid death domain in its cytoplasmic tail. This domain is essential for the recruitment of a number of signaling components upon activation by either agonistic anti-CD95 antibodies or cognate CD95 ligand that initiate apoptosis. The complex of proteins that forms upon triggering of CD95 is called the death-inducting signaling complex (DISC). The DISC consists of an adaptor protein and initiator caspases and is essential for induction of apoptosis. CD95 is also crucial for the negative selection of B cells within the germinal center (GC). Impairment of CD95-mediated apoptosis results in defective affinity maturation and the persistence of autoreactive B-cell clones. Changes in the expression of CD95 and/or its ligand CD95L are frequently found in human cancer. The downregulation or mutation of CD95 has been proposed as a mechanism by which cancer cells avoid destruction by the immune system through reduced apoptosis sensitivity. Thus, CD95 has therefore been viewed as a tumor suppressor. CD95 has been reported to be involved in the activation of NF-kappaB, MAPK3/ERK1, MAPK8/JNK, and the alternate pathways for CTL-mediated cytotoxicity. Accordingly, this protein is implicated in the pathogenesis of various malignancies and diseases of the immune system. The CD95/CD95L system was implicated in the etiology of inflammatory bowel disease (IBD) based, primarily, on the finding that CD95 is highly expressed in the intestinal epithelial cells and that epithelial apoptosis is increased in IBD.

References

1.Mschen M, *et al.* (2002) The origin of CD95-gene mutations in B-cell lymphoma. Trends Immunol. 23(2): 75-80.
2.Peter ME, *et al.* (2003) The CD95(APO-1/Fas) DISC and beyond. Cell Death Differ. 10(1): 26-35.
3.Peter ME, *et al.* (2005) Does CD95 have tumor promoting activities Biochim Biophys Acta. 1755(1): 25-36.