Cynomolgus FAS / CD95 / APO-1 / TNFRSF6 Protein (Fc Tag)

Catalog Number: 90273-C02H

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

FAS

Protein Construction:

A DNA sequence encoding the cynomolgus FAS (F6V1W6) (Met1-Asp173) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

1. 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 0.5-3 μg/mL in the presence of 200 ng/mL recombinant human Fas ligand. 2. Measured by its binding ability in a functional ELISA. Immobilized human His-FASLG (Cat: 10244-H07Y) at 10 μg/ml (100 μl/well) can bind Cynomolgus FAS-Fc. The EC_{50} of Cynomolgus FAS-Fc is 0.06-0.14 μg/ml.

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 26

Molecular Mass:

The recombinant cynomolgus FAS is a disulfide-linked homodimer. The reduced monomer comprises 389 amino acids and has a calculated molecular mass of 43.8 KDa.The apparent molecular mass of the protein is approximately 47-57 KDa in SDS-PAGE.

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:

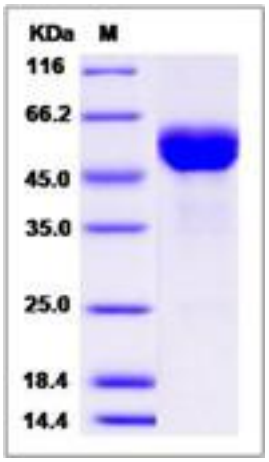
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 8 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.