

Recombinant human Forkhead box protein P3

Catalog No: #AP72283



Package Size: #AP72283-1 20ug #AP72283-2 100ug #AP72283-3 1mg

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Description

Product Name	Recombinant human Forkhead box protein P3
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-260aaSequence Info:Partial
Other Names	Scurfin
Accession No.	Q9BZS1
Uniprot	Q9BZS1
GeneID	50943;
Calculated MW	31.7 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	MPNPRPGKPSAPSLALGSPGASPSWRAAPKASDLLGARGPGGTFQGRDLRGGAHASSSSLNPMPPSQLQ LPTLPLVMVAPSGARLGPLPHLQALLQDRPHFMHQLSTVDAHARTPVLQVHPLESPAMISLTPPTTATGVFSLK ARPLPPGINVASLEWWSREPALLCTFPNPSAPRKDSTLSAVPQSSYLLANGVCKWPGCEKVFEEPEDFLK HCQADHLLDEKGRAQCLLQREMVQSLEQQLVLEKEKLSAMQAHL
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Transcriptional regulator which is crucial for the development and inhibitory function of regulatory T-cells (Treg). Plays an essential role in maintaining homeostasis of the immune syst by allowing the acquisition of full suppressive function and stability of the Treg lineage, and by directly modulating the expansion and function of conventional T-cells. Can act either as a transcriptional repressor or a transcriptional activator depending on its interactions with other transcription factors, histone acetylases and deacetylases. The suppressive activity of Treg involves the coordinate activation of many genes, including CTLA4 and TNFRSF18 by FOXP3 along with repression of genes encoding cytokines such as interleukin-2 (IL2) and interferon-gamma (IFNG). Inhibits cytokine production and T-cell effector function by repressing the activity of two key transcription factors, RELA and NFATC2 . Mediates transcriptional repression of IL2 via its association with histone acetylase KAT5 and histone deacetylase HDAC7 . Can activate the expression of TNFRSF18, IL2RA and CTLA4 and repress the expression of IL2 and IFNG via its association with transcription factor RUNX1 . Inhibits the differentiation of IL17 producing helper T-cells (Th17) by antagonizing RORC function, leading to down-regulation of IL17 expression, favoring Treg development . Inhibits the transcriptional activator activity of RORA . Can repress the expression of IL2 and IFNG via its association with transcription factor IKZF4 .

References

Disruption of a new forkhead,winged-helix protein, scurfin, results in the fatal lymphoproliferative disorder of the scurfy mouse.Brunkow M.E., Jeffery

Note: This product is for in vitro research use only