

Product datasheet for AM12131PU-N

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Foxp3 Mouse Monoclonal Antibody [Clone ID: 3G3]

Product data:

Product Type: Primary Antibodies

Clone Name: 3G3

Applications: FC, WB

Recommended Dilution: Flow cytometry (Application note see below).

Western blot: 2 µg/ml.

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full-length His-tagged recombinant murine FoxP3

Specificity: The mouse monoclonal antibody 3G3 recognizes N-terminal region of FoxP3, a 47-55 kDa

transcription factor, which is the master regulator in the development and function of

regulatory T cells.

Formulation: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

State: Aff - Purified State: Liquid Ig fraction

Concentration: lot specific

Purification: Protein A affinity chromatography

Conjugation: Unconjugated

Storage: Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C. Avoid repeated freezing and

thawing.

Stability: Shelf life: one year from despatch.

Gene Name: forkhead box P3

Database Link: Entrez Gene 50943 HumanEntrez Gene 20371 Mouse

Q99|B6





Background:

FoxP3 (Forkhead box protein 3), a highly conserved forkhead/winged-helix transcription factor, plays a crucial role in maintaining immune homeostasis by governing the development and function of regulatory T cells. It is constitutively expressed at high level in CD25+ CD4+ Treg cells and at low level in a CD25- CD4+ Treg cell subset. Defects in gene encoding FoxP3 protein cause the scurfy phenotype in mice, and in human the IPEX syndrome (immune dysfunction, polyendocrinopathy, enteropathy, X-linked syndrome), also known as X-linked autoimmunity-allergic dysregulation (XLAAD) syndrome.

Synonyms:

Forkhead box protein P3, IPEX, JM2, Scurfin

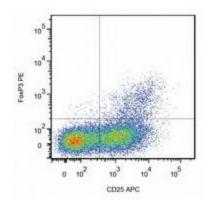
Note:

Application note for Flow cytometry:

Staining method:

- Perform staining of cell surface markers (CD25, CD4 etc.) for 20 min. in the dark and RT. Wash.
- Add cold fixation buffer diluted to working concentration (if commercial reagent is used, follow the manufacturer's instructions) and incubate for 30-45 min. in 4°C.
- Centrifugate (200 g, 5 min., 4°C) and add a cold permeabilization buffer diluted to working concentration (if commercial reagent is used, follow the manufacturer's instructions) to the pellet of cells.
- Centrifugate, and add to the pellet 100 μ l of the permeabilization buffer and 5-50 μ l of blocking solution (NMS, FTS, 1% BSA etc., or commercial blocking solutions) incubate for 15 min. (4°C, in the dark).
- Perform intracellular staining of FoxP3 for 30 min. (4°C, in the dark) with appropriate amount of 3G3 antibody (final concentration 2-10 μ g/ml; optimal concentration for peripheral blood is 3 μ g/ml).
- Centrifugate (200 g, 5 min., 4°C) and add 4 ml of cold permeabilization buffer to the pellet.
- Centrifugate again (200 g, 5 min., 4° C) and add 100 μ l of staining buffer (PBS with 0.2% BSA). Keep cold until measuring on a flow cytometry device with appropriate setting. (If necessary, for the same sample use mouse IgG1 isotype control in the same format as anti-FoxP3 antibody 3G3.)

Product images:



Intracellular staining of human peripheral blood cells (gated on CD4+ cells) with anti-FoxP3 (clone 3G3).