

FoxP3

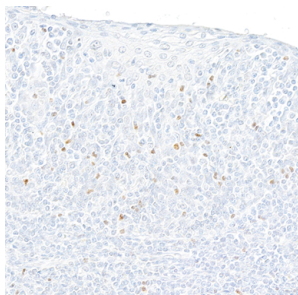
Background Information

FoxP3 is a transcription factor critical for the development and function of regulatory T cells (Tregs). It belongs to the forkhead-winged-helix family of transcription factors that also includes **FOXO** and **FOXM1**. FoxP3 interacts with a variety of cofactors, such as **ARID1A**, **CHD8**, and **MED15**, and other transcription factors, including **Bcl11b**, **FoxP1**, and **FoxP4**, to form large protein complexes that selectively regulate gene expression. FoxP3 expression often results in the production of anti-inflammatory cytokines, modulation of antigen presenting cell function, and induction of apoptosis in effector immune cells. FoxP3 is essential for immune homeostasis by aiding in the generation of immune tolerance and inhibiting autoimmune responses. Indeed, FoxP3 can selectively regulate the transcription of some of its own binding partners to fine-tune this immune response. Mutations in FoxP3 can lead to severe immune dysregulation, resulting in diseases like Immunodysregulation, Polyendocrinopathy, Enteropathy, X-linked (IPEX) syndrome.¹⁻³

Product Number: A700-281
Reactivity: Human
Validated Applications: ICC, IHC, IP, WB
Full Name: Forkhead box protein P3
Gene ID: 50943
Uniprot ID: Q9BZS1
Alternative Names: AIID, DIETER, IPEX, JM2, PIDX, XPID

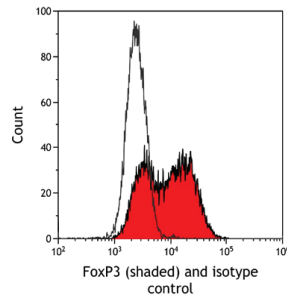
Product Number: A700-282
Reactivity: Human
Validated Applications: Flow Cyt, IP, WB
Full Name: Forkhead box protein P3
Gene ID: 50943
Uniprot ID: Q9BZS1
Alternative Names: AIID, DIETER, IPEX, JM2, PIDX, XPID

Featured Applications



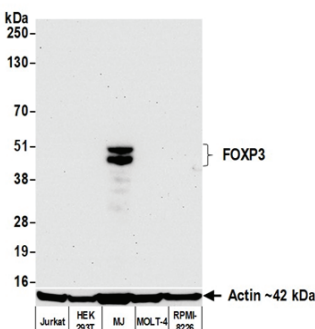
Detection of human FoxP3 by immunohistochemistry.

Sample: FFPE section of tonsil carcinoma.
Antibody: A700-281.



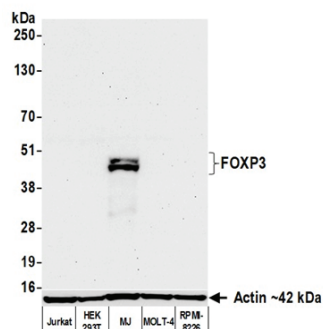
Detection of human FoxP3 (shaded) in MJ cells by flow cytometry.

Antibody: A700-282 used at 0.5µL per 10⁶ cells.



Detection of human FoxP3 by western blot.

Antibody: A700-281 used at 1:1000.



Detection of human FoxP3 by western blot.

Antibody: A700-282 used at 1:1000.

References:

1. Lu L, Barbi J, Pan F. The regulation of immune tolerance by FOXP3. *Nat Rev Immunol.* 2017;17(11):703-717. doi:10.1038/nri.2017.75
2. Rudensky AY. Regulatory T cells and Foxp3. *Immunity Rev.* 2011;24(1):260-268. doi:10.1011/j.1600-065X.2011.01018.x
3. Rudra D, deRoos P, Chaudhry A, et al. Transcription factor Foxp3 and its protein partners form a complex regulatory network. *Nat Immunol.* 2012;13(10):1010-1019. doi:10.1038/ni.2402

Inhibitory Cytokines

