FOXP3

CONTACT INFORMATION: Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
LRF Haemato-oncology Group. University of Oxford

STATUS: Validated

TYPE: mouse anti human

CLONE NAME: 236A

PROTEIN: Human full length FOXP3


ANTIGEN USED: GST-FOXP3 recombinant protein

FUSION PARTNER: myeloma p3-NS1/Ag4-1 (NS1) cells.

ISOTYPE: IgG1

SPECIES REACTIVITY: Human

PREPARATION AND STORAGE: Aliquot and store at 4C. Do not freeze

APP RECOMMENDED: IHQ-paraffin, IHQ-frozen, IF, WB, Flow cytometry

APP NO TESTED: IP

DESCRIPTION

FOXP3 is a forkhead-family transcription factor that negatively regulates T cell function. Mice carrying a loss-of-function mutation in FoxP3 present with fatal autoimmune-like disease caused by hyperresponsive CD4(+) T cells. Mice that overexpress scurfin possess fewer mature T cells with reduced functional capabilities compared with normal littermate control mice. FOXP3 is critical for normal CD4+ T cell function and for the successful coordination of a normal response to immunological challenge in vivo.

PUBLICATION DESCRIBING ANTIBODY CHARACTERIZATION/VALIDATION


REFERENCES


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**FOXP3 antibody (236A) in transfected cells.**

Validation of FOXP3 236A monoclonal antibody in COS-FOXP3, COS-FOXP1, COS-FOXP2 and COS-FOXP4 transfected cells.
Cytocentrifuge preparation of MT-2 cell line.

MT-2 cell line is a human T cell leukemia virus carrier cell line that express FOXP3 protein.
FOXP3 expression in human frozen tonsil.
FOXP3 (236A) expression in human paraffin sections.

In tonsil, thymus and spleen FOXP3 protein is expressed in the nucleus of regulatory T cell present in the T cell area. Testicle tissue is negative.
**FOXP3 (236A) immunofluorescence in human tonsil**

Double immunofluorescence staining with FOXP3 (green) and PD-1 (NAT) in red

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<td>neat</td>
<td>supernatant</td>
<td>MT2 cell line</td>
<td>human kidney</td>
<td>47kDa</td>
<td>47kDa</td>
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**Immunoprecipitation**
Western Blotting characterization of 236A monoclonal antibody

Antibody 236A recognises HEK-FOXP3 transfected cells and MT-2 cell line (human T cell leukemia virus carrier cell line) by WB.

Lane 1 HEK-FOXP3 transfected cells (20ug) (+)
Lane 2 HEK-mTIMP2 transfected cells (20ug) (-)
Lane 3 MT2 cell line (150ug) (+)
Epitope map of anti-FOXP3 (236A) antibody

The figure shows Foxp3 protein functional domains and the location of epitope recognized by 236A antibody (aa105-236). Foxp3 contains a Zn finger/Leucine zipper and a conserved Forkhead Domain.