



Division of Human Genetics

## X-linked immune dysregulation, polyendocrinopathy, enteropathy syndrome (*FOXP3*)

Molecular Genetics Laboratory

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Additional information and test requisitions are  
available at:

[www.cincinnatichildrens.org/molecular-genetics](http://www.cincinnatichildrens.org/molecular-genetics)



*Helping you fit the  
pieces together*

### Shipping Instructions

Please enclose test requisition with sample.  
All information must be completed before  
sample can be processed.

Place samples in Styrofoam mailer and ship  
at room temperature by overnight Federal  
Express to arrive Monday through Friday

Ship to:

Cytogenetics and Molecular Genetics  
Laboratories

3333 Burnet Avenue NRB 1042

Cincinnati, OH 45229

513-636-4474

IPEX typically presents during infancy with systemic autoimmunity often presenting as the classical triad of endocrinopathy (type I diabetes or thyroid disease), severe watery diarrhea and dermatitis.

Older individuals typically develop failure-to-thrive, life-threatening infections and additional autoimmune disorders including various cytopenias, tubular nephropathy and alopecia. IPEX is an X-linked recessive disorder and is caused by mutations in the *FOXP3* gene, located at Xp11.23. *FOXP3* is composed of 11 exons. Pathologic mutations have been described in most of the exons.

### INDICATIONS

- Confirmation of diagnosis in an at-risk or symptomatic individual
- Carrier identification in females with a family history
- Prenatal diagnosis of an at-risk fetus, after identification of a mutation in a proband (by previous arrangement only).

### METHODOLOGY

PCR-based sequencing of the entire coding region and intron/exon boundaries of the *FOXP3* gene.

## SPECIMEN:

At least 3mLs whole blood in lavender top (EDTA) tube. Label tube with patient's name, birth date, and date of collection. Buccal swabs or cytobrushes are required for analysis in patients who have undergone transplantation and may facilitate DNA isolation in patients undergoing chemotherapy or in individuals with leukopenia.

**Please call for a free cytobrush collection kit.**

## SENSITIVITY:

Sequencing detects about 99% of mutations in the coding regions and intron/exon boundaries of the *FOXP3* gene in males. Approximately 60% of males with IPEX have an identifiable mutation in *FOXP3*.

## TURN-AROUND TIME:

30 days

## COST:

Please call 1-866-450-4198 for institutional pricing or with any billing questions.

## CPT CODES:

*Full gene sequence analysis* 81479

*Family specific mutation analysis* 81403

## RESULTS:

Results will be reported to the referring physician or health care provider as specified on the requisition form.