

# Sodium Iodide Symporter Monoclonal Antibody

## ORDERING INFORMATION

**Catalog No.:** 11563 (clone FP5)

**Size:** 100ug (1mg/ml) in PBS, pH 7.4, 50% glycerol, 0.09% sodium azide. Purified by Protein G affinity chromatography.

## BACKGROUND

The sodium iodide symporter (NIS) is an ion pump that actively transports iodide across the basolateral membrane into thyroid epithelial cells. This is an important step in the process of iodide organification and the formation of triiodothyronine and thyroxine. The importance of NIS is related to its role in thyroid function, the pathogenesis of thyroid disease, and its expression (or lack of expression) in thyroid malignancies. It has also been suggested that NIS may represent an autoantigen in autoimmune disease of the thyroid.

## SPECIFICATION SUMMARY

**Antigen:** Fusion protein consisting of aa468-643 of human NIS attached to mannose binding protein (MBP).

**Host Species:** Mouse

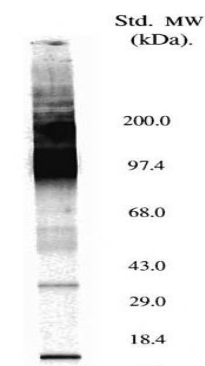
**Antibody Class:** IgG1

## SPECIFICITY

This antibody recognizes human, mouse and rat NIS.

## APPLICATIONS

**Immunoblotting:** use at 1ug/ml. A major band of ~97kDa is detected. Depending on the sample, some minor bands may be detected as well.



COS-7 cells transfected with human NIS (Castro et al. 1999 J Endocrinology 163: 495-504)

**Immunohistochemistry:** use at 1-10ug/ml.

**Positive control:** Graves disease-thyroid tissue.

These are recommended concentrations; enduser should determine optimal concentrations for their applications.

## DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

## STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freeze-thaw cycles.

*For in vitro investigational use only. Not intended for diagnostic or therapeutic applications.*