

PRODUCT DATA SHEET

Product Data Sheet:	Sheep Monoclonal Antibodies (SMAs) to: Thyroid stimulating hormone (TSH)
SMA Covered	Epitope group 1: TSH.1H11, TSH.6C10 Epitope group 2: TSH.6C9, TSH.11H5, TSH.12C7 Epitope group 3: TSH.4C3 Epitope group 4: TSH.6F11
Production Description	Thyroid-stimulating hormone (TSH) is a glycoprotein hormone, synthesized and secreted by thyrotrope cells in the anterior pituitary gland. TSH stimulates the thyroid gland to produce thyroxine (T4), and then triiodothyronine (T3). As TSH regulates the endocrine function of the thyroid gland, it forms part of the thyroid testing panel.

Manufacturing Specification (all SMAs)

Parameter	Specification	Test Method
Buffer and pH	PBS +0.1% Sodium azide at 7.3-7.4	pH Meter
Antibody Concentration	1-3 mg/mL	A ₂₈₀ (E _c = 1.4)
Purity and Aggregates	Single Main Peak ≥90%	Size Exclusion HPLC
Immunological Activity	±20% biological activity of frozen reference standard	In house ELISA

Antibody Pairing

In ELISAs performed at Bioventix, all the antibodies can pair with each other to facilitate sensitive assays for TSH – except for antibodies from the same group which do not pair with each other.

Isoelectric Focussing

Epitope group 1: TSH.1H11 (6.0-6.5), TSH.6C10 (6.0-6.5)
 Epitope group 2: TSH.6C9 (6.5-7.0), TSH.11H5 (7.5-8.0), TSH.12C7 (7.0-7.5)
 Epitope group 3: TSH.4C3 (7.0-7.5)
 Epitope group 4: TSH.6F11 (6.0-6.5)

Note: for *in vitro* diagnostic use only