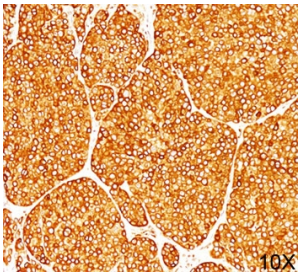
Tyrosinase Antibody [clone T311] (V2290)

Catalog No.	Formulation	Size
V2290-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2290-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2290SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2290IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

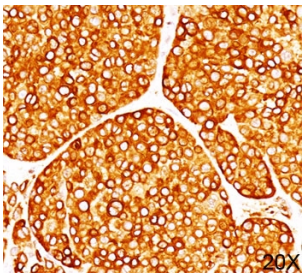
Citations (12)

Bulk quote request

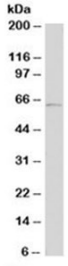
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	T311
Purity	Protein G affinity chromatography
Gene ID	7299
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This **Tyrosinase antibody** is available for research use only.



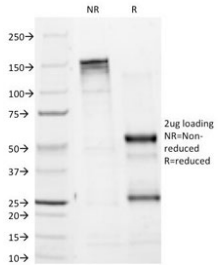
IHC staining of melanoma tissue (10X) with Tyrosinase antibody (T311).



IHC staining of melanoma tissue (20X) with Tyrosinase antibody (T311).



Western blot testing of human A375 cell lysate with Tyrosinase antibody (clone T311). Expected molecular weight: ~60-84kDa depending on glycosylation level.



SDS-PAGE Analysis of Purified, BSA-Free Tyrosinase Antibody (clone T311). Confirmation of Integrity and Purity of the Antibody.

Description

Tyrosinase antibody clone T311 is a monoclonal antibody specific for tyrosinase, a key enzyme in the melanin biosynthesis pathway. Tyrosinase catalyzes the hydroxylation of tyrosine and the subsequent oxidation of DOPA, early steps that lead to the production of melanin pigments. Tyrosinase is expressed in melanocytes and melanoma cells, making it an important biomarker for pigment biology and melanoma diagnostics. NSJ Bioreagents supplies Tyrosinase antibody clone T311 for use in pigment cell research, dermatology, and oncology.

Tyrosinase antibody clone T311 produces strong cytoplasmic staining in melanocytes and pigmented tumors. In pathology, it is a widely used marker for confirming melanocytic origin. Alongside other markers such as gp100 and Melan-A, clone T311 helps distinguish melanomas from non-melanocytic malignancies, ensuring accurate diagnosis. It is especially valuable in evaluating amelanotic melanomas, where pigment is absent but tyrosinase expression can still be detected immunohistochemically.

In melanoma research, tyrosinase antibody clone T311 has been applied to investigate tumor progression, antigen presentation, and immune recognition. Tyrosinase is recognized as a melanoma associated antigen by cytotoxic T lymphocytes, making it a target for immunotherapy strategies. Detection with clone T311 supports studies into vaccine development and T cell-based therapies directed against melanoma.

Beyond oncology, tyrosinase antibody clone T311 contributes to studies of pigmentary disorders. Altered expression or function of tyrosinase is implicated in albinism, vitiligo, and other pigmentation diseases. Researchers use this antibody to evaluate tyrosinase distribution and activity in both normal and diseased skin.

This antibody is validated for tissue and cell-based studies, producing reproducible cytoplasmic signals. It has been widely cited in literature covering melanoma diagnostics, pigment biology, and immunology. Alternate names include DOPA oxidase antibody, melanoma tyrosinase antibody, and pigment enzyme tyrosinase antibody.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant Tyrosinase protein was used as the immunogen for this antibody. Subsequent testing has localized the epitope to within amino acids 233-247 (IPYWDWRDAEKCDIC) (see Citation 12).

Storage

Store the Tyrosinase antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (1)