

Localization – Nuclear

Host Species – Rabbit

Ig Class – IgG

Intended Use

This antibody is designed for the specific localization of TRPS1 in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

Product Description

The trichorhinophalangeal syndrome 1 (TRPS-1) gene belongs to the GATA transcription factor family and has been identified as highly prevalent in breast cancer, being expressed in over 90% of both estrogen receptor alpha (ER α)+ and ER α - breast cancer subtypes. Currently, the GATA3 tumor marker is commonly used to identify the breast origin in ER-positive and low-grade breast cancer. However, its sensitivity is less than 20% in metaplastic breast carcinoma, such as Triple-Negative Breast Cancer (TNBC). In contrast, TRPS1 and GATA3 show comparable positive expression in ER-positive (98% vs. 95%) and HER2-positive (87% vs. 88%) breast carcinomas. However, TRPS1 exhibits higher expression than GATA3 in metaplastic (86% vs. 21%) and nonmetaplastic (86% vs. 51%) TNBC cases. Data from The Cancer Genome Atlas (TCGA) indicate that TRPS1 is a specific gene for breast carcinoma among 31 solid tumor types, including all four subtypes of breast carcinoma: ER/PR-positive luminal A and B types, HER2-positive type, and basal-type/TNBC. TRPS1 shows little to no expression in lung, pancreatic, colon, gastric adenocarcinomas, urothelial, renal, or ovarian carcinomas, or melanoma. Therefore, TRPS1 can be concluded to be a sensitive and specific marker for breast cancer, particularly for TNBC.

Material Supplied

TRPS1 antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

Material required But Not Supplied

- Xylene
- DI Water
- Control Tissues
- Isopropyl alcohol
- Antigen retrieval buffers
- Hematoxylin
- Positive charged slides
- Blocking Reagents
- Mounting media
- Wash Buffer
- Detection System
- Cover glass

Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

Control Tissue	Ductal Breast Carcinoma, Triple Negative Carcinoma.	Antibody Incubation Time	30-60 Minutes at RT
Dilution factor	1:20-50 (Antibody Diluent: DH144)	Retrieval Pre-treatment	Tris-EDTA based HIER (AR9 Buffer: DH020)

Precautions










This product should be used by qualified and trained professional users only.

Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contain sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.

Limitations







Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

Doc No: DH/DS/TRPS1300Rev.00

	Manufacturer Details		Use by Date		Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use		Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests		In-vitro Diagnostic Medical Device



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	Manufacturing Date		Consult Instructions for Use	REF	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	IVD	In-vitro Diagnostic Medical Device