

Instructions For Use

RA0719-C-IFU-RUO

Rev. Date: Aug 12, 2024

Revision: 1

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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

CD276 / B7-H3; Clone B7H3/4312 (Concentrate)

Availability/Contents: Volume Item #

RA0719-C.1 0.1 ml RA0719-C.5 0.5 ml RA0719-C1 1 ml

Description:

Species: Mouse

Immunogen: Recombinant fragment (around aa100-300) of human CD276 protein (exact sequence is

proprietary)

B7H3/4312 Clone: Isotype: IgG1 / Kappa Entrez Gene ID: 80381 Hu Chromosome Loc.: 15q24.1

CD276 antigen, 4lg-B7-H3, B7 homolog 3, Costimulatory molecule, 4lg B7 H3; B7 homolog 3; Synonyms:

B7-H3; B7H3; B7RP-2; CD276; CD276 antigen; CD276 molecule; Costimulatory molecule

Mol. Weight of Antigen: B7-H3 isoforms: 57/34/53/57 kDa; glycosylated B7-H3: 90-110 kDa

200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM Format:

PBS with 0.05% BSA & 0.05% azide.

Specificity: Recognizes CD276/B7-H3

Background: T cell activation and immune function are regulated by the innate immune system through

> positive and negative costimulatory molecules. One such molecule, B7-H3 (B7-homolog 3, also designated B7RP-2) belongs to the B7 immunoglobulin superfamily. Soluble B7-H3 binds a putative receptor on activated T-cells that is distinct from CD28, CTLA-4, ICOS and PD-1. Widely expressed on nonlymphoid tissues, B7-H3 costimulates proliferation of both CD4+ and CD8+ T cells. The ability of B7-H3 to stimulate Th1 and cytotoxic-T cell responses suggest that it may have antitumor activity. B7-H3 interactions may play a role in regulating cell-mediated

immune responses against cancer, implicating B7-H3 as a potential therapeutic tool.

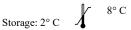
Species Reactivity:

Positive Control: hepatocellular carcinoma or lung carcinoma, Human tonsil, Placenta

Cellular Localization: Cytoplasm. Cell surface.

Titer/ Working Dilution: Immunohistochemistry (Frozen and Formalin-fixed): 1-2µg/ml

Microbiological State: This product is not sterile.





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Uses/Limitations: Not to be taken internally.

For Research Use Only.

This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded

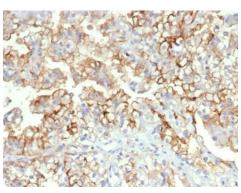
tissue sections, to be viewed by light

microscopy.

Do not use if reagent becomes cloudy. Do not use past expiration date.

Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



Formalin-fixed, paraffin-embedded human kidney carcinoma stained with CD276 / B7-H3 Mouse Monoclonal Antibody (B7H3/4312) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

Procedure:

- 1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time: We suggest an incubation period of 30 minutes at room temperature.
 However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- 3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).

Do not pipette by mouth.

Avoid contact of reagents and specimens with skin and mucous membranes.

Avoid microbial contamination of reagents or increased nonspecific staining may occur.

This product contains no hazardous material at a <u>reportable concentration</u> according to U.S. 29 CFR 1910.1200,

OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

 Liu, F., et al. 2015. B7-H3 promotes cell migration and invasion through the Jak2/Stat3/MMP9 signaling pathway in colorectal cancer. Mol. Med. Rep. 12: 5455-5460.

Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C 8° C

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