Human APCDD1
Alexa Fluor® 594-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2584B
Catalog Number: FAB10501T
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human APCDD1 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2584B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Mouse myeloma cell line, NS0-derived human APCDD1 Leu27-His492 Accession # Q8J025
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10^6 cells	SW480 human colorectal adenocarcinoma cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** • 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

APCDD1 (Adenomatosis Polyposis Coli Down-Regulated 1) is a membrane bound glycoprotein that is an endogenous inhibitor of the Wnt signaling pathway (1, 2). Inhibition of Wnt signaling by APCDD1 plays a role in adipocyte differentiation as well as pathogenesis of disease (2-4). Mature human APCDD1 consists of a 465 amino acid (aa) extracellular domain (ECD), a 19 aa transmembrane domain, and a 1 aa cytoplasmic region. Human APCDD1 shares a 95% and 94% amino acid sequence similarity with rat and mouse respectively. APCDD1 interacts *in vitro* with Wnt-3a and LRP5 (5). It is expressed in a broad repertoire of cell types which might regulate a diversity of biological processes controlled by Wnt signaling, including breast cancer cell invasion (6), osteogenic differentiation of human dental follicle cells (7), vascular remodeling and barrier maturation of retinal blood vessels (4) and hair follicle miniaturization (5). Extracellular domain of APCDD1 has been shown to co-immunoprecipitate with recombinant Wnt-3a and LRP5 (1), suggesting that APCDD1 can modulate the Wnt pathway by potential interactions with Wnt-3a and LRP5 at the cell surface.

References:

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2. Yiew, N.K.H. *et al.* (2017) J. Biol. Chem. **292**:6312.
3. Shimomura, Y. (2010) Nature **464**:1043.
4. Kandimalla, R. (2017) Oncogenesis **6**:e308.
5. Yutaka Shimomura, *et al.* (2010) Nature **464**:1043.
6. Sung-Gook CHO, (2017) Oncology Letters **14**:4845.
7. Viale-Bouroncle S. *et al.* (2015) Biochem Biophys Res Commun **457(3)**:314.

PRODUCT SPECIFIC NOTICES

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449