Rabbit Anti-LGR5/GPR49 [8G9]: RM0192

Intended Use: For Research Use Only

Description: Leucine-rich repeat containing G protein-coupled receptor 5 (LGR5) is a seven-transmembrane G-protein coupled receptor (GPR49). It belongs to the family of glycoprotein hormone receptor family. LGR5 is present in the endometrium layer. The LGR5 gene is located on human chromosome location 12q21.1. LGR5 binds to R-spondin and enhances the Wnt/ β-catenin pathway. It stimulates tumor progression and induces colorectal cancer development. Lgr5 acts as a potential stem cell marker in numerous adult tissues. It has pathological significance in various cancers, like breast, colon, stomach, liver and esophagus. Elevated expression of LGR5 is associated with breast, ovarian, colon and hepatocellular cancers. Breast cancer patients with high-grade ER- and high levels of LGR5 expression often die due to breast cancer. Most fatal cases of ductal carcinoma in situ (DCIS) were LGR5+. Some studies find that the LGR5 expression pattern can be used as a biomarker to identify patients that need therapy and that LGR5 could be a therapeutic target for high-grade ER- breast cancer.

Specifications

Clone:	8G9
Source:	Rabbit
Isotype:	IgG
Reactivity:	Human, mouse, rat
Immunogen:	Synthetic peptide within human LGR5 aa 800 to 900
Localization:	Nucleus
Formulation:	Protein A purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC, WB

Package:

Description	Catalog No.	Size
LGR5/GPR49 Concentrated	RM0192	1 ml

IHC Procedure*

Positive Control Tissue:	Lymph node, breast or bladder or thyroid carcinoma, colon adenocarcinoma
Concentrated Dilution:	10-100
Pretreatment:	Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

References:

1. LGR5 in breast cancer and ductal carcinoma in situ: a diagnostic and prognostic biomarker and a therapeutic target. Catharina Hagerling, et al. BMC Cancer. 2020; 20: 542. PMCID: PMC7285764.
2. Characterization of LGR5 expression in poorly differentiated colorectal carcinoma with mismatch repair protein deficiency. Tomoyuki Nakajima, et al. BMC Cancer volume 20, 319, 2020.
3. LGR5 overexpression confers poor relapse-free survival in breast cancer patients. Ming-Feng Hou, et al. BMC Cancer. 18:219, 2018.

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