LRG1

Leucine-rich alpha-2 glycoprotein (LRG1) is a protein encoded by the LRG1 gene in humans. It belongs to the leucine-rich repeat (LRR) family of proteins and is characterized by the presence of multiple leucine-rich repeats in its structure. LRG1 is a glycoprotein, meaning it contains sugar molecules attached to its polypeptide chain.

LRG1 has been implicated in various physiological and pathological processes. It is known to be involved in inflammation, immune response, and angiogenesis (the formation of new blood vessels). Elevated levels of LRG1 have been associated with certain diseases, including cancer, rheumatoid arthritis, and cardiovascular diseases.

Researchers have studied LRG1 in the context of cancer because its expression has been found to be upregulated in various types of cancer, such as colorectal cancer, ovarian cancer, and hepatocellular carcinoma. The specific role of LRG1 in cancer progression and its potential as a biomarker or therapeutic target are areas of ongoing research.

In addition to its association with cancer, LRG1 has been investigated in other diseases and conditions to understand its functions and potential clinical significance. However, the precise mechanisms by which LRG1 influences these processes are still being elucidated, and further research is needed to fully understand its role in health and disease.

According to the current research results on LRG, Ma et al. found that the agency of LRG has much to do with the known pathological process of normal pressure hydrocephalus. According to the collected literature evidence, they speculated that LRG probably be involved in the pathological process of NPH. Finally, based on the mechanism of LRG and NPH, they also summarized the evidence of molecular targeted therapies for future research and clinical application [1)].

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Ma L, Wang W, Zhao Y, Liu M, Ye W, Li X. Application of LRG mechanism in normal pressure hydrocephalus. Heliyon. 2023 Dec 16;10(1):e23940. doi: 10.1016/j.heliyon.2023.e23940. PMID: 38223707; PMCID: PMC10784321.