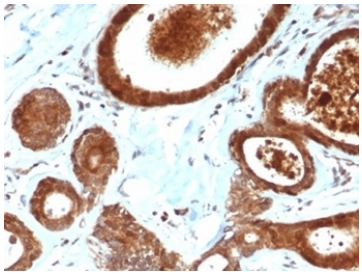
Leucine-rich alpha-2-glycoprotein Antibody / LRG1 [clone LRG1/4883] (V9606)

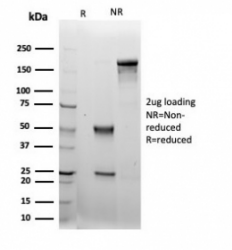
Catalog No.	Formulation	Size
V9606-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9606-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9606SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

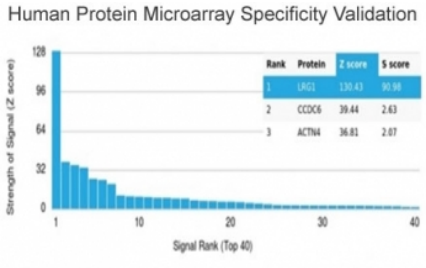
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	LRG1/4883
Purity	Protein A/G affinity
UniProt	P02750
Localization	Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Leucine-rich alpha-2-glycoprotein antibody is available for research use only.



IHC staining of FFPE human breast tissue with Leucine-rich alpha-2-glycoprotein antibody (clone LRG1/4883) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Leucine-rich alpha-2-glycoprotein antibody (clone LRG1/4883) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Leucine-rich alpha-2-glycoprotein antibody (clone LRG1/4883). These results demonstrate the foremost specificity of the LRG1/4883 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Leucine-rich alpha-2-glycoprotein antibody recognizes Leucine-rich alpha-2-glycoprotein 1, encoded by the LRG1 gene and commonly referred to as LRG1. LRG1 is a secreted glycoprotein characterized by multiple leucine-rich repeat domains that mediate protein-protein interactions. It is synthesized primarily in hepatocytes and neutrophils and is released into the circulation, where it functions as an acute phase and inflammation-associated protein. Leucine-rich alpha-2-glycoprotein antibody detects this extracellular protein that is found in plasma and deposited within tissue microenvironments under inflammatory or pathological conditions.

Structurally, LRG1 contains a series of leucine-rich repeat motifs forming a curved solenoid structure that facilitates ligand binding and interaction with signaling molecules. Although initially described as a serum protein of unclear function, LRG1 has since been shown to modulate transforming growth factor beta signaling and to influence angiogenesis. In endothelial cells, LRG1 promotes pro-angiogenic signaling pathways and has been implicated in vascular remodeling and neovascularization.

Functionally, LRG1 expression increases in response to inflammatory stimuli and has been associated with chronic inflammatory diseases, autoimmune conditions, and cardiovascular pathology. Elevated circulating levels have been reported in various cancers, and tissue expression may be observed in tumor stroma, endothelial cells, and inflammatory infiltrates. Because of its role in angiogenic signaling, LRG1 is actively studied in the context of tumor progression, retinal vascular disease, and fibrotic disorders.

The LRG1 gene is located on chromosome 19 and encodes a secreted protein that is glycosylated and detectable in serum and extracellular matrix-rich environments. In research settings, detection of LRG1 can provide insight into inflammatory status, vascular remodeling, and tumor microenvironment dynamics.

The Leucine-rich alpha-2-glycoprotein antibody (clone LRG1/4883) is suitable for detecting LRG1 protein expression in research applications. This LRG1 antibody supports studies of inflammation, angiogenesis, vascular biology, and cancer-related signaling pathways.

Application Notes

Optimal dilution of the Leucine-rich alpha-2-glycoprotein antibody should be determined by the researcher.

Immunogen

A portion of amino acids 30-180 was used as the immunogen for the Leucine-rich alpha-2-glycoprotein antibody.

Storage

Aliquot the Leucine-rich alpha-2-glycoprotein antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Copyright © NSJ Bioreagents. All rights reserved.