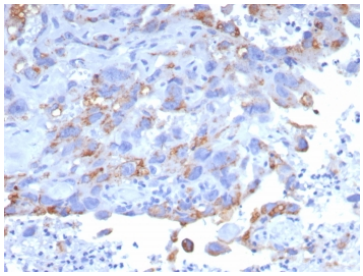
RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody [clone GPRC5A/7893] (V4236)

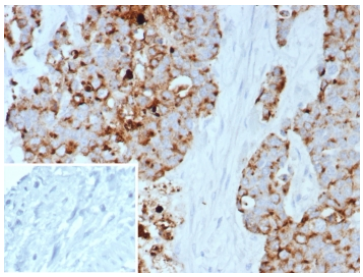
Catalog No.	Formulation	Size
V4236-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4236-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4236SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	GPRC5A/7893
Purity	Protein A/G affinity
UniProt	Q8NFJ5
Localization	Cell membrane, Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody is available for research use only.



RAIG1 Antibody Human Bladder IHC. Immunohistochemistry analysis of FFPE human bladder tissue using RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody (clone GPRC5A/7893). Heat induced antigen retrieval was performed by boiling tissue sections in pH 9 Tris-EDTA buffer for 20 minutes prior to staining. Membranous and cytoplasmic staining is observed in urothelial epithelial cells, consistent with the localization of RAIG1 (GPRC5A), a retinoic acid-regulated orphan G protein-coupled receptor expressed in epithelial tissues. These results support the use of RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody for studying GPRC5A expression, epithelial differentiation and retinoic acid-regulated GPCR signaling.



RAIG1 Antibody Human Bladder Carcinoma IHC. Immunohistochemistry analysis of FFPE human bladder carcinoma tissue using RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody (clone GPRC5A/7893). Inset: PBS was used in place of the primary antibody as a negative control. Heat induced antigen retrieval was performed by boiling tissue sections in pH 9 Tris-EDTA buffer for 20 minutes prior to staining. Strong membranous and cytoplasmic staining is observed in malignant urothelial cells, while the negative control shows no specific staining, supporting antibody specificity. These results support the use of RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody for studying GPRC5A expression, epithelial differentiation and retinoic acid-regulated GPCR signaling.

Description

RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody detects GPRC5A, also called RAI3 and PEIG-1, an orphan class C G protein-coupled receptor originally identified as a retinoic acid-responsive gene in epithelial tissues. The name RAIG1, for Retinoic Acid Induced Gene 1, remains widely recognized in the literature and reflects the receptor's regulation by retinoic acid signaling pathways. RAIG1 is expressed predominantly in epithelial cells, particularly within the respiratory tract, where it contributes to epithelial differentiation, tissue homeostasis and cellular responses to environmental stress. RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody is widely used in studies of GPCR biology, epithelial function and cancer.

RAIG1 belongs to the class C family of G protein-coupled receptors but differs from many well-characterized GPCRs because its endogenous ligand has not been conclusively identified. Instead, its biological activity appears to be regulated through transcriptional control, receptor interactions and downstream signaling pathways. Retinoic acid induces RAIG1 expression during epithelial differentiation, linking vitamin A metabolism with maintenance of epithelial integrity and normal tissue function. RAIG1 has also been associated with pathways involving epidermal growth factor receptor, signal transducer and activator of transcription and nuclear factor kappa B signaling, all of which influence proliferation, differentiation and inflammatory responses.

Altered RAIG1 expression has been reported in several epithelial malignancies, with the strongest evidence supporting a tumor suppressor role in lung epithelium. Reduced expression may contribute to abnormal epithelial proliferation and impaired tissue homeostasis, while dysregulated expression has also been described in cancers of the colon, pancreas, stomach, breast and head and neck. Because the biological effects of RAIG1 appear to depend upon tissue type and cellular context, antibody-based detection is valuable for comparing normal and malignant tissues across multiple experimental systems.

This page features clone GPRC5A/7893, a mouse monoclonal antibody developed for reliable detection of RAIG1/GPRC5A in research applications. The antibody supports Western blot, immunohistochemistry, immunofluorescence and other immunoassays used to examine receptor expression, localization and epithelial signaling pathways. RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody provides researchers with a dependable tool for investigating retinoic acid-responsive GPCR biology and epithelial cell regulation.

NSJ Bioreagents offers RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody products for studies of epithelial biology, GPCR signaling and cancer progression. Researchers interested in the broader biology of this receptor family may also benefit from examining GPRC5A expression across normal and diseased tissues using complementary antibodies.

Researchers studying RAIG1 and epithelial GPCR signaling may also be interested in our GPRC5A Antibody / Retinoic Acid Inducible GPCR Antibody page, which provides additional information on GPRC5A biology and its role in epithelial homeostasis, lung biology and cancer research.

Application Notes

Optimal dilution of the RAIG1 Antibody / Retinoic Acid Induced Gene 1 Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 200-357) from the human protein was used as the immunogen for the RAIG1 antibody.

Storage

Aliquot the RAIG1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

GPRC5A antibody, RAI3 antibody, Retinoic Acid Inducible GPCR antibody, G Protein Coupled Receptor Family C Group 5 Member A antibody, GPCR Family C Group 5 Member A antibody, GPRC5A Protein antibody

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