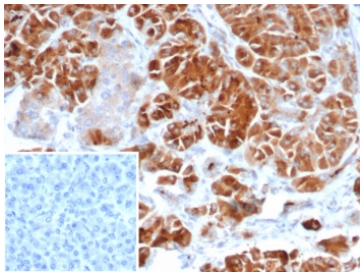
IL22RA2 Antibody / Immune Regulation Marker [clone IL22RA2/7291] (V5184)

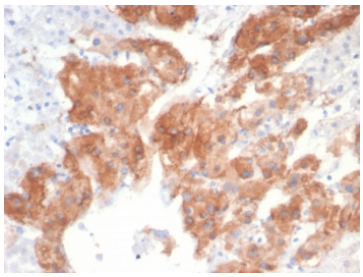
Catalog No.	Formulation	Size
V5184-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5184-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5184SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	IL22RA2/7291
Purity	Protein A/G affinity
UniProt	Q969J5
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This IL22RA2 Antibody / Immune Regulation Marker is available for research use only.



IL22RA2 Antibody Adrenal Gland IHC. Immunohistochemistry analysis of FFPE human adrenal gland tissue using IL22RA2 antibody. The mouse monoclonal antibody clone IL22RA2/7291 shows cytoplasmic staining in glandular cells, consistent with Interleukin-22 receptor subunit alpha 2 / IL22RA2 expression as an immune regulation marker. Cellular staining highlights localized production of this secreted decoy receptor within endocrine tissue, while surrounding stromal elements display lower signal. A PBS-only control confirms minimal non-specific staining. HIER: boil tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling prior to staining.



IL22RA2 Antibody Human Adrenal Gland Tissue IHC. Immunohistochemistry analysis of FFPE human adrenal gland tissue using IL22RA2 antibody. The mouse monoclonal antibody clone IL22RA2/7291 demonstrates cytoplasmic staining in glandular cells, consistent with Interleukin-22 receptor subunit alpha 2 / IL22RA2 expression as an immune regulation marker. Signal is observed within clusters of adrenal cortical cells, reflecting localized production of this secreted decoy receptor, while surrounding non-glandular elements show lower staining. HIER: boil tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling prior to staining.

Description

Interleukin-22 receptor subunit alpha 2 (IL22RA2) is a secreted glycoprotein that functions as a high-affinity decoy receptor for interleukin-22 (IL-22), a cytokine involved in mucosal immunity, epithelial barrier maintenance, and tissue repair. IL22RA2 antibody is widely used to investigate this proteinÃ¢Â€Â™s role in modulating cytokine signaling and maintaining immune balance in inflammatory and barrier tissues. By binding IL-22 and preventing its interaction with membrane-bound receptor complexes, IL22RA2 serves as a key regulator of IL-22-driven biological responses.

IL22RA2 antibody, also known as Interleukin-22 receptor subunit alpha 2 antibody or IL22BP antibody in the literature, enables detection of this protein in pathways associated with immune regulation, cytokine signaling control, and epithelial homeostasis. Unlike membrane-bound receptor subunits, IL22RA2 is secreted into the extracellular environment, where it acts as a soluble antagonist that limits IL-22 availability. This unique functional role positions IL22RA2 as a critical checkpoint molecule within the IL-22 signaling axis.

Functionally, IL22RA2 plays an essential role in balancing the protective and pathogenic effects of IL-22. While IL-22 promotes epithelial regeneration, antimicrobial defense, and barrier integrity, excessive signaling can contribute to chronic inflammation, autoimmune disease, and tumor progression. IL22RA2 mitigates these effects by sequestering IL-22 and preventing overstimulation of downstream pathways such as STAT3 activation. IL22RA2 antibody is therefore valuable for studying immune regulation mechanisms in diseases including inflammatory bowel disease, psoriasis, and cancer.

Expression of IL22RA2 is tightly controlled and is most commonly associated with immune cell populations such as dendritic cells, as well as epithelial tissues under inflammatory conditions. Its secretion allows it to function in a paracrine manner, modulating cytokine activity within the local tissue microenvironment. This regulatory role is particularly important at barrier surfaces such as the gastrointestinal tract and skin, where precise control of cytokine signaling is required to maintain tissue integrity and immune homeostasis.

Subcellularly, IL22RA2 is synthesized in the endoplasmic reticulum and trafficked through the secretory pathway before being released into the extracellular space. Once secreted, it binds IL-22 with high affinity, preventing receptor engagement and downstream signaling. This extracellular mode of action distinguishes IL22RA2 from signaling receptor subunits and influences how it is detected in experimental systems. IL22RA2 antibody supports investigation of both intracellular production and extracellular distribution of this regulatory protein.

This IL22RA2 antibody is supported by protein microarray specificity validation, demonstrating selective binding to IL22RA2 among a large panel of human proteins. Western blot and immunohistochemistry data further support detection of IL22RA2 in relevant biological samples. Together, these validation approaches provide confidence in specificity and performance, making this antibody a useful tool for studies of IL-22 signaling regulation, immune responses, and inflammatory disease mechanisms.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the IL22RA2 Antibody / Immune Regulation Marker should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the IL22RA2 antibody.

Storage

Aliquot the IL22RA2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com