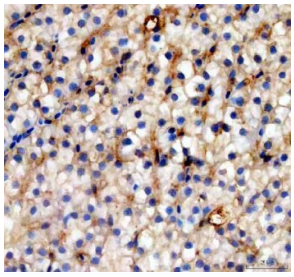
Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody (RZ1376)

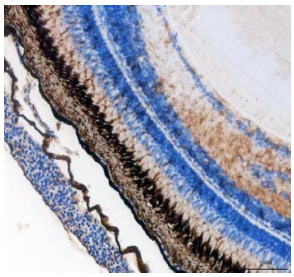
Catalog No.	Formulation	Size
RZ1376	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

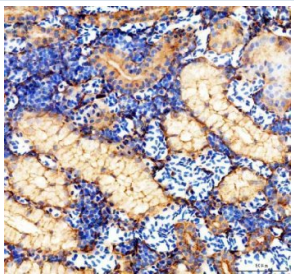
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Lyophilized from a buffered saline solution containing 2% trehalose. Reconstitute with 0.2 mL distilled water to yield a final antibody concentration of 500 ug/mL.
UniProt	Q6NWF6
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody is available for research use only.



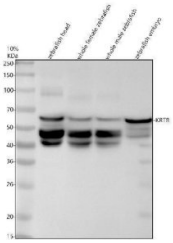
Zebrafish Cytokeratin 8 Antibody Eye IHC. Immunohistochemistry analysis of KRT8 using Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody demonstrates distinct cytoplasmic and membranous HRP-DAB brown staining within cellular populations of zebrafish eye tissue. The staining pattern is consistent with expression of Keratin 8 (KRT8), a type II intermediate filament protein that contributes to epithelial cell structure, cytoskeletal organization, and tissue integrity. Immunoreactivity is observed throughout epithelial-like cellular compartments and is consistent with the established role of KRT8 in maintaining cellular architecture and supporting tissue homeostasis. The observed staining demonstrates the utility of this antibody for studies of epithelial biology, intermediate filament organization, tissue development, cellular differentiation, and cytoskeletal regulation in zebrafish models. Heat-mediated antigen retrieval was performed in EDTA buffer prior to staining.



Zebrafish Cytokeratin 8 Antibody Retina IHC. Immunohistochemistry analysis of KRT8 using Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody demonstrates strong HRP-DAB brown staining within layered epithelial structures of zebrafish eye tissue, with prominent immunoreactivity along the retinal pigment epithelium and adjacent retinal-associated cellular layers. The staining pattern is consistent with expression of Keratin 8 (KRT8), a type II intermediate filament protein involved in epithelial cell structure, cytoskeletal organization, and tissue integrity. The distinct localization within ocular epithelial compartments supports the established role of KRT8 in maintaining cellular architecture and epithelial homeostasis. The observed staining demonstrates the utility of this antibody for studies of eye development, epithelial biology, intermediate filament organization, tissue differentiation, and cytoskeletal regulation in zebrafish models. Heat-mediated antigen retrieval was performed in EDTA buffer prior to staining.



Zebrafish Cytokeratin 8 Antibody Kidney IHC. Immunohistochemistry analysis of KRT8 using Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody demonstrates prominent cytoplasmic and membranous HRP-DAB brown staining within epithelial cells lining renal tubular and glandular-like structures of zebrafish kidney tissue. The staining pattern is consistent with expression of Keratin 8 (KRT8), a type II intermediate filament protein that contributes to epithelial cell architecture, cytoskeletal stability, and tissue organization. Strong immunoreactivity within epithelial compartments supports the established role of KRT8 in maintaining epithelial integrity and cellular homeostasis. The observed staining demonstrates the utility of this antibody for studies of kidney development, epithelial biology, intermediate filament organization, tissue differentiation, and cytoskeletal regulation in zebrafish models. Heat-mediated antigen retrieval was performed in EDTA buffer prior to staining.



Zebrafish Cytokeratin 8 Antibody WB. Western blot analysis of KRT8 using Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody demonstrates a prominent immunoreactive band at approximately 57 kDa in zebrafish head, whole female, whole male, and embryo tissue lysates. The observed molecular weight is consistent with the predicted size of Keratin 8 (KRT8), a type II intermediate filament protein that serves as a major structural component of epithelial cells. Consistent detection across developmental and adult tissue samples supports broad expression of KRT8 and confirms recognition of the target protein. Additional lower molecular weight bands observed in selected samples may represent keratin processing products, alternatively modified forms, or tissue-specific intermediate filament-associated proteins. The observed immunoreactivity demonstrates the utility of this antibody for studies of epithelial biology, cytoskeletal organization, intermediate filament function, tissue development, cellular differentiation, and regenerative processes in zebrafish models.

Description

Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody recognizes Keratin 8 (KRT8), a type II intermediate filament protein that serves as a major structural component of epithelial cells. Cytokeratin 8 is one of the principal keratins expressed in simple epithelial tissues and functions together with its type I keratin partners to form intermediate filament networks that provide mechanical stability, maintain cellular architecture, and support tissue integrity. In zebrafish, KRT8 contributes to epithelial organization, tissue development, and maintenance of structural homeostasis throughout embryonic development and adulthood.

Cytokeratins are critical components of the cytoskeleton and play essential roles beyond structural support. Intermediate filament networks formed by KRT8 help regulate cell shape, intracellular organization, stress responses, and interactions with neighboring cells and the extracellular environment. These functions enable epithelial tissues to withstand mechanical stress while maintaining normal barrier and organizational properties. Because epithelial cells are fundamental to organ formation and tissue architecture, KRT8 is widely used as a marker of epithelial lineage and

differentiation.

Zebrafish have become a valuable vertebrate model for studying developmental biology, tissue morphogenesis, epithelial organization, and regenerative processes. Expression of KRT8 is associated with epithelial structures undergoing growth, differentiation, and remodeling, making it a useful marker for investigations of tissue development and epithelial cell biology. The optical accessibility and genetic tractability of zebrafish further support the use of KRT8 as a tool for studying epithelial organization during vertebrate development.

Intermediate filament proteins such as KRT8 also participate in cellular responses to injury, environmental stress, and tissue remodeling. Alterations in keratin expression can influence epithelial stability, cellular signaling, and regenerative responses. Consequently, KRT8 is frequently examined in studies of epithelial differentiation, developmental regulation, tissue repair, and cytoskeletal organization. Monitoring KRT8 expression can provide valuable insight into the molecular mechanisms that govern epithelial tissue formation and maintenance.

At NSJ Bioreagents, we provide highly validated antibodies for developmental biology, epithelial biology, cytoskeletal research, and zebrafish model systems. Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody is useful for investigations of epithelial development, intermediate filament biology, tissue organization, cellular architecture, regenerative processes, and cytoskeletal regulation. Continued study of KRT8 is improving our understanding of how epithelial tissues maintain structure, function, and homeostasis during development and disease.

Researchers seeking protein microarray validated detection of Keratin 8 for epithelial differentiation, cytoskeletal biology, and cancer research applications may also be interested in our Cytokeratin 8 Antibody page.

This Zebrafish antibody is part of a broader Zebrafish / Danio rerio antibody panel offered by NSJ Bioreagents.

Application Notes

The optimal working dilution of the Zebrafish Cytokeratin 8 Antibody / KRT8 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish Cytokeratin 8/KRT8 recombinant protein (amino acids S17-D520) was used as the immunogen for the Zebrafish Cytokeratin 8 Antibody.

Storage

After reconstitution, the Zebrafish Cytokeratin 8 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Zebrafish Cytokeratin 8 Antibody, Zebrafish KRT8 Antibody, Zebrafish Keratin 8 Antibody, Zebrafish Type II Cytokeratin Antibody, Zebrafish Intermediate Filament Protein Antibody, Zebrafish Epithelial Keratin Antibody