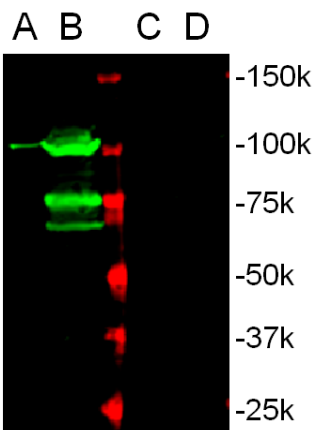




Product Data Sheet

Product Name:	Anti-Nkx-2.1a (IN), Z-Fish™ (Zebrafish <i>NK2 homeobox 1a</i>)
Catalog Number:	55584
Lot Number:	See label on vial
Product Description:	This rabbit polyclonal antibody is supplied as an epitope-affinity purified rabbit IgG in 250 µl of 40 mM MOPS buffer (pH 7.5) containing 0.1% BSA, 0.05% NaN ₃ , and 50% glycerol.
Immunogen:	A synthetic peptide derived from the intermediate region of zebrafish Nkx-2.1a protein (GenBank accession #: NP_571664.1).
Species Reactivity:	The species reactivity is exclusively to zebrafish. The antibody reactivity was validated by ELISA. The specificity was confirmed by western blot analysis in zebrafish lysates.
Application Notes:	The following concentration ranges are recommended starting points for this product. The investigator should determine the optimal working concentrations for specific applications.

ELISA for immunizing peptide: 1: 5,000-20,000
Western blot: 1: 500-1,000



Western blot analysis of Nkx-2.1a in zebrafish embryonic nuclear lysate (24 hpf) and zebrafish embryonic whole cell lysate (72 hpf) with the anti-zebrafish Nkx-2.1a (IN) antibody (cat# 55584). A single band at ~100 kDa was detected in the nuclear lysate (lane A). Three bands at 100 kDa, 75 kDa, and 70 kDa were detected in embryonic whole cell lysate (lane B). All bands were blocked by the immunizing peptide (lane C and D).

Background:

Nk2 homeobox 1 alpha (Nkx-2.1a) is a member of the Nk-2 family of homeobox genes. Expression of Nkx-2.1a, along with hemopoietically expressed homeobox (hhx) is regulated during zebrafish development by the thyroid primordium (1). Similar to paired box protein 2.1 (pax2.1), both hhx and nkx2.1 play later roles in the differentiation or growth of thyroid follicular cells (1). Pax2.1, hhx and nkx2.1 all act in parallel for this purpose, and have similar functions in mammalian thyroid development (1).

References:

1. Elsalini, OA et al (2003) Dev. Biol. 263(1):67-80

Storage:

Store at -20 °C for up to 24 months upon receiving the product.

Related Products:

Anti-Nkx-2.1a (IN) blocking peptide, Z-Fish™, catalog number: 55584P

Compatible Secondary Antibodies:

Catalog #	Goat anti-Rabbit IgG (H+L)
28176	Unconjugated
28176-AMCA	AMCA Labeled
28176-FAM	FAM Labeled
28176-FITC	FITC Labeled
28176-TAMRA	TAMRA Labeled
28176-H488	HiLyte Fluor™ 488 Labeled
28176-H555	HiLyte Fluor™ 555 Labeled
28176-H594	HiLyte Fluor™ 594 Labeled
28176-H647	HiLyte Fluor™ 647 Labeled
28176-H680	HiLyte Fluor™ 680 Labeled
28176-H750	HiLyte Fluor™ 750 Labeled
61056-H488	Highly Cross-adsorbed, HiLyte Fluor™ 488 Labeled
61056-H555	Highly Cross-adsorbed, HiLyte Fluor™ 555 Labeled
61056-H594	Highly Cross-adsorbed, HiLyte Fluor™ 594 Labeled
61056-H647	Highly Cross-adsorbed, HiLyte Fluor™ 647 Labeled
61056-H680	Highly Cross-adsorbed, HiLyte Fluor™ 680 Labeled
61056-H750	Highly Cross-adsorbed, HiLyte Fluor™ 750 Labeled
28177	Highly Cross-adsorbed, HRP Labeled
28178	Highly Cross-adsorbed, AP Labeled
28179	Highly Cross-adsorbed, Biotin Labeled

This product is for *in vitro* research use only.