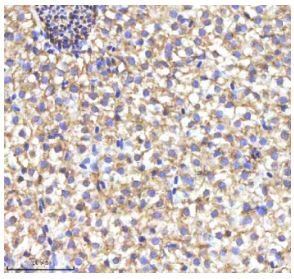
# Zebrafish Myd88 Antibody (RZ1242)

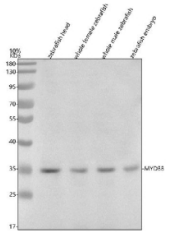
| Catalog No. | Formulation | Size |
|---|---|---|
| RZ1242 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

## Bulk quote request

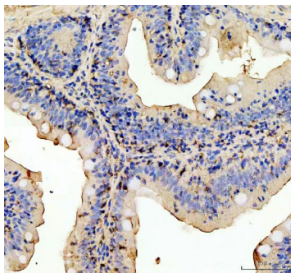
| | |
|---|---|
| **Availability** | 2-3 weeks |
| **Species Reactivity** | Zebrafish |
| **Format** | Antigen affinity purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Purity** | Antigen affinity chromatography |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | Q5XJ85 |
| **Localization** | Cytoplasm |
| **Applications** | Western Blot : 0.5-1ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml |
| **Limitations** | This Zebrafish Myd88 antibody is available for research use only. |



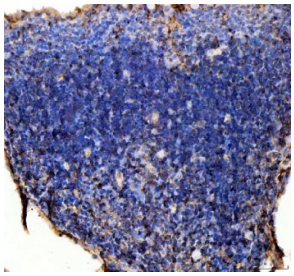
IHC staining of FFPE zebrafish liver tissue with Myd88 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis of Myd88 protein using Zebrafish Myd88 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~33 kDa.



IHC staining of FFPE zebrafish colon tissue with Myd88 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE zebrafish thymus tissue with Myd88 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

## Description

Myd88, or myeloid differentiation primary response protein 88, is an essential adaptor molecule in the innate immune system. In zebrafish, Myd88 mediates signal transduction from toll like receptors and interleukin one receptors, leading to activation of downstream inflammatory pathways that are critical for host defense.

Myd88 contains a death domain and a toll interleukin one receptor domain, which allow it to interact with both membrane bound receptors and cytoplasmic signaling proteins. Upon stimulation by pathogen associated molecular patterns such as bacterial lipopolysaccharide or viral RNA, toll like receptors recruit Myd88 to initiate signaling cascades that activate nuclear factor kappa B and mitogen activated protein kinases. This results in the production of proinflammatory cytokines and chemokines.

In zebrafish, Myd88 is maternally deposited and expressed throughout development, with increased expression in immune tissues such as the kidney and intestine. It plays a vital role in early immune responses to infection and has been extensively used in zebrafish models of inflammation, pathogen challenge, and immune signaling.

Loss of Myd88 function in zebrafish leads to impaired cytokine production and increased susceptibility to microbial infections, making it a valuable target for studies of innate immunity and inflammation. Due to its conservation across vertebrate species, zebrafish Myd88 is a widely used model for dissecting toll like receptor signaling and for testing immunomodulatory drugs.

## Application Notes

Optimal dilution of the Zebrafish Myd88 antibody should be determined by the researcher.

## Immunogen

E. coli-derived zebrafish Myd88 recombinant protein (amino acids M1-K266) was used as the immunogen for the Zebrafish Myd88 antibody.

## Storage

After reconstitution, the Zebrafish Myd88 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.