

KD-Validated Anti-ZPR1 Zinc Finger Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1758

Specification

KD-Validated Anti-ZPR1 Zinc Finger Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession 075312

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 51 kDa , observed , 51 kDa KDa

Gene Name ZPR

Aliases ZPR1; ZPR1 Zinc Finger; Zinc Finger

Protein 259; ZNF259; Zinc Finger Protein

ZPR1; GKAF

Immunogen A synthesized peptide derived from human

ZNF259

KD-Validated Anti-ZPR1 Zinc Finger Rabbit Monoclonal Antibody - Additional Information

Gene ID **8882**

Other Names

Zinc finger protein ZPR1, Zinc finger protein 259, ZPR1, ZNF259

KD-Validated Anti-ZPR1 Zinc Finger Rabbit Monoclonal Antibody - Protein Information

Name ZPR1

Synonyms ZNF259

Function

Acts as a signaling molecule that communicates proliferative growth signals from the cytoplasm to the nucleus. It is involved in the positive regulation of cell cycle progression (PubMed:29851065). Plays a role for the localization and accumulation of the survival motor neuron protein SMN1 in sub-nuclear bodies, including gems and Cajal bodies. Induces neuron differentiation and stimulates axonal growth and formation of growth cone in spinal cord motor neurons. Plays a role in the splicing of cellular pre-mRNAs. May be involved in H(2)O(2)-induced neuronal cell death.

Cellular Location

Nucleus. Nucleus, nucleolus. Nucleus, gem. Nucleus, Cajal body. Cytoplasm, perinuclear region. Cytoplasm. Cell projection, axon. Cell projection, growth cone. Note=Colocalized with SMN1 in Gemini of coiled bodies (gems), Cajal bodies, axon and growth cones of neurons (By similarity) Localized predominantly in the cytoplasm in serum-starved cells growth arrested in G0 of the mitotic cell cycle. Localized both in the nucleus and cytoplasm at the G1 phase of the mitotic cell cycle. Accumulates in the subnuclear bodies during progression into the S phase of the mitotic cell cycle. Diffusely localized throughout the cell during mitosis. Colocalized with NPAT and SMN1 in



nuclear bodies including gems (Gemini of coiled bodies) and Cajal bodies in a cell cycledependent manner. Translocates together with EEF1A1 from the cytoplasm to the nucleolus after treatment with mitogens. Colocalized with EGFR in the cytoplasm of quiescent cells. Translocates from the cytoplasm to the nucleus in a epidermal growth factor (EGF)-dependent manner

Tissue Location

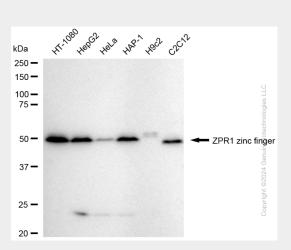
Expressed in fibroblast; weakly expressed in fibroblast of spinal muscular atrophy (SMA) patients

KD-Validated Anti-ZPR1 Zinc Finger Rabbit Monoclonal Antibody - Protocols

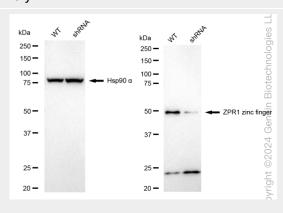
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KD-Validated Anti-ZPR1 Zinc Finger Rabbit Monoclonal Antibody - Images

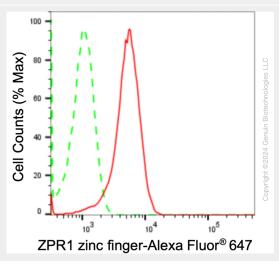


Western blotting analysis using anti-ZPR1 zinc finger antibody (Cat#AGI1758). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ZPR1 zinc finger antibody (Cat#AGI1758, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

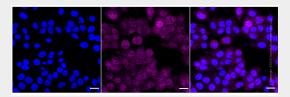




Western blotting analysis using anti-ZPR1 zinc finger antibody (Cat#AGI1758). ZPR1 zinc finger expression in wild-type (WT) and ZPR1 zinc finger (ZPR1) shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ZPR1 zinc finger antibody (Cat#AGI1758, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ZPR1 zinc finger expression in HepG2 cells using anti-ZPR1 zinc finger antibody (Cat#AGI1758, 1:2,000). Green, isotype control; red, ZPR1 zinc finger.



Immunocytochemical staining of HepG2 cells with anti-ZPR1 zinc finger antibody (Cat#AGI1758, 1:1,000). Nuclei were stained blue with DAPI; ZPR1 zinc finger was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: $20~\mu m$.