



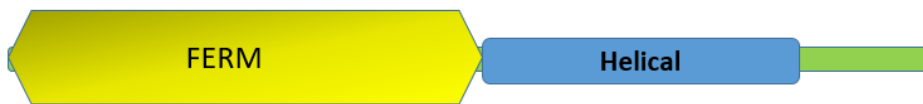
PRODUCT SPECIFICATION

Recombinant anti-human Ezrin nanobody 22.

Catalogue number: sdAb-Ezrin-Nb22

Background

Ezrin (aka cytovillin, villin-2) is a member of the closely related family of ERM proteins (Ezrin, Radixin, Moesin). They act as cross-linkers between membrane proteins and the actin cytoskeleton. The N-terminal FERM domain is involved in anchoring the protein to the plasma membrane. Ezrin interacts with NHERF, phospholipids, actin and CD44. Ezrin is involved in wound healing, cell migration, signaling, cancer cell invasion and metastasis.



Applications: WB, PD, IP, ELISA. This product is for R&D use only, not for drug, diagnostic, therapeutic, household, or other uses.

Source and properties

Ezrin nanobody 22 was raised by immunizing a llama with full length human recombinant Ezrin, shown in the figure below. It binds with an **affinity of around 1 nM** ($\pm 5 \times 10^{-11}$). Its epitope has not been determined. The CDR3 sequence of nb22 is quite divergent from the one of Ezrin nb47 which may suggest they bind to different Ezrin epitopes.

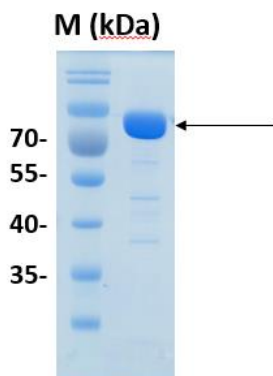


Figure: Purified recombinant human Ezrin used for generating llama Ezrin-specific nanobodies.

Availability: Ezrin Nanobody 22 comes with a COOH-terminal HA or Myc epitope tag. Available in 100 μ g, 500 μ g, 1000 μ g quantities. For bulk amounts, please inquire.

Expression host: VHH single domain antibody purified from *E. coli*.

Cross reactivity: Reactivity of this nanobody with Ezrin from other species has not been tested.

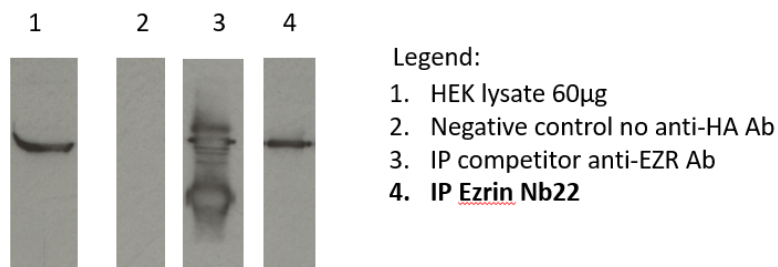
Storage buffer: 20 mM Tris-HCl pH 8.0, 150 mM NaCl, 1mM DTT, 60 % glycerol. Store at -20°C.
The sample will not freeze. Maintain sample in cold environment during transport to increase longevity.

Stability: Store at -20°C upon arrival. For long term storage, aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.

Product citations: /

Functional experiment: pull down of human Ezrin from HEK93T cells with Nb22.

Ezrin immunoprecipitation from HEK293T cell extracts using HA-tagged Ezrin nanobody
SDS-Page 10% - Western Blot with rabbit polyclonal anti Ezrin Ab 1/1000.



Note: Multiple nanobodies were tested in one experiment, which is why lane 3 in this blot is the same as lane 2 in the Ezrin Nb47 blot. **Please enquire for other high affinity Ezrin nanobodies if you are interested in epitope mapping, or proteomics studies or interactomics.**