

PRODUCT SPECIFICATION

Recombinant anti-human Cortactin NTA nanobody 2.

Catalogue number: sdAb-Cortactin NTA-Nb2



Background

Cortactin is a multidomain cytoskeletal protein and a crucial component in cell migration (via Arp 2/3) and cancer cell invasion and metastasis. Cortactin is an early constituent of podosomes (immune cells) and invadopodia (cancer cells), structures/organelles used by cells to degrade the extracellular matrix and migrate to a site of infection (immune cells) or escape from a primary tumor (cancer cells). The protein is overexpressed in various types of cancer.

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

Source and properties

Cortactin NTA Nb2 was raised by immunizing an alpaca with a fragment of human His₆-tagged cortactin comprising the N-terminal NTA domain and 6.5 repeats region. The nanobody binds to the NTA domain with an **approximate affinity of 3 μM (determined by ITC)**. NTA Nb2 decreases cortactin-Arp2/3 mediated actin polymerization in vitro, and alters invadopodium stability in cells and concomitant matrix degradation.

Availability: Cortactin SH3 nanobody 2 comes with a COOH-terminal HA or Myc epitope tag. Available in 100 μg, 500 μg, 1000 μg quantities. For bulk amounts, please inquire.

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

Cross reactivity: Reactivity of this nanobody with cortactin 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:

1. Bertier L, Boucherie C, Zwaenepoel O, Vanloo B, Van Troys M, et al. 2017. *FASEB J*