

PRODUCT SPECIFICATION

Recombinant anti-human Cortactin FHP nanobody 11.

Catalogue number: sdAb-Cortactin FHP-Nb11



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

Source and properties:

Cortactin FHP Nb11 was raised by immunizing an alpaca with human His₆- tagged cortactin lacking the N-terminal NTA domain and the C-terminal SH3 region. The nanobody binds to this cortactin fragment with an **approximate affinity of 0.65 μ M (determined by ITC)**. On western blot, FHP Nb11 recognizes full length cortactin in protein extracts from i.e. MDA-MB-231 breast cancer cells and HNSCC-61 cancer cells. In further epitope mapping experiments it can be observed that the nanobody recognizes the helical-proline-rich-SH3 segment, more specifically the helical segment. Does not cross-react with HS-1.



Availability: Cortactin FHP nanobody 11 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*.

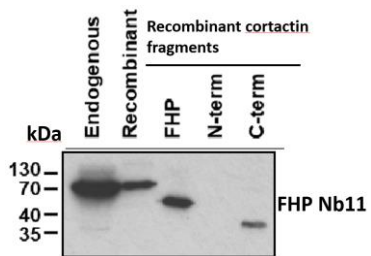
Cross reactivity: Reactivity of this nanobody with cortactin from other species has not been tested.

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:

Bertier L, et al. *Biomed Pharmacother.* 2018;102:230-241.



Detection of endogenous (SCC-61 head and neck squamous cell carcinoma cells) and recombinant cortactin using V5-tagged FHP Nb11.