



PRODUCT SPECIFICATION

Recombinant anti-human p53 TAD nanobody28.

Catalogue number: sdAb-p53 TAD-Nb28

Recombinant anti-human p53 TAD nanobody43.

Catalogue number: sdAb-p53 TAD-Nb43

Recombinant anti-human p53 TAD nanobody16.

Catalogue number: sdAb-p53 TAD-Nb16

Background :

p53 is a tetrameric transcription factor and tumor suppressor that hardly requires introduction. Once described as guardian of the genome, it controls numerous aspects of cellular behaviour.

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

Source and properties:

Nbs against the transactivation domain of p53 (TAD, AA 1–102) were generated by immunization of an alpaca with purified human p53 TAD. All TAD Nanobodies are suitable for immunoprecipitation of p53 from human cells. Nanobody 43 was reported to be less efficient in *in vivo* pull down experiments (1). The affinity, as determined by ITC, is 290 nM (nb 28), 93 nM (nb 43). The affinity of nb 16 has not yet been determined but it was shown that this nanobody worked very well in *in vitro* and *in vivo* pull down experiments (following expression of the nanobody cDNA in human cells as intrabody).

Availability: p53 TAD Nanobodies come 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 with p53 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. Steels, A, Verhelle, A, Zwaenepoel, O, Gettemans, J, 2018. *mAbs* Oct;10(7):1045-1059. doi: 10.1080/19420862.2018.1502025. Epub 2018 Sep 11.