



PRODUCT SPECIFICATION

Recombinant anti-human p53 DBD nanobody 3.

Catalogue number: sdAb-p53 DBD-Nb3

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. Mutations in p53 are observed in over 50% of cancers. Several hot spot mutations occur in the DNA binding domain of p53 (R175H, G245S, R282W, R249S, R273H and R248W).

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

Source and properties:

p53 DBD Nb3 was raised by immunizing an alpaca with human recombinant p53 DNA-binding domain. Immunoprecipitation experiments using H1299 (p53 null) cells that overexpress structural mutants of p53 demonstrate that Nb3 binds poorly to R248W/R273H but rather to R175H/G245S/R282W/R249S. It is reported to be specific for p53 (no cross-reaction with p63/p73).

Availability: p53 DBD nanobody 3 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 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. Bethuyne J, De Gieter S, Zwaenepoel O, Garcia-Pino A, Durinck K, et al. 2014. *Nucleic Acids Res* 42: 12928-38