



PRODUCT SPECIFICATION

Recombinant anti-human p53 DBD nanobody 139.

Catalogue number: sdAb-p53 DBD-Nb139

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 Nb139 was raised by immunizing an alpaca with human recombinant p53 DNA-binding domain. Immunoprecipitation experiments using H1299 p53 null cells indicate that Nb139 interacts with both wild type p53 as well as structural mutants of p53 (listed above). It is reported to be specific for p53 (no cross-reaction with p63/p73). It binds with an **approximate affinity of 1 μ M (as determined by ITC) to recombinant wild type p53 DBD.**

Availability: p53 DBD nanobody 139 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 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