## Background

Survivin is also known as BIRC5 ( 16.5 kDa ) and a member of the Inhibitor of Apoptosis Protein (IAP) family. Survivin expression is cell-cycle dependent and the protein is involved in chromosome alignment, sister chromatid segregation and cytokinesis. Mitochondrial survivin protects against apoptosis. SVV is highly expressed in many cancer types. High expression increases tumour cell migration and invasion and maintains cancer stem cell integrity.

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
Survivin nanobody 8 was raised by immunizing an alpaca with full length human His6-tagged survivin. It binds to a conformational epitope in survivin with an approximate affinity of 0.9 nM (determined by ITC). This nanobody was used in cells to redirect endogenous survivin to different cellular compartments (mitochondrial intermembrane space, nucleus, peroxisome, mitochondrial outer membrane). It acts as a survivin tracer in cells.

Availability: $\quad$ Nanobody 8 comes with a COOH-terminal HA or Myc epitope tag. Available in 100 $\mu \mathrm{g}, 500 \mu \mathrm{~g}, 1000 \mu \mathrm{~g}$ quantities. For bulk amounts, please inquire.

Expression host: VHH single domain antibody purified from E. coli.
Cross reactivity: Reactivity of this nanobody with survivin from other species has not been tested.

Storage buffer: $\quad 20 \mathrm{mM}$ Tris- $\mathrm{HCl} \mathrm{pH} 8.0,150 \mathrm{mM} \mathrm{NaCl}, 1 \mathrm{mM}$ DTT, $60 \%$ glycerol. Store at $-20^{\circ} \mathrm{C}$.
The sample will not freeze. Maintain sample in cold environment during transport to increase longevity.

Stability: $\quad$ Store at $-20^{\circ} \mathrm{C}$ upon arrival. For long term storage, aliquot and store at $-80^{\circ} \mathrm{C}$. Avoid repeated freeze/thaw cycles.

Product citations:

1. Beghein E, Van Audenhove I, Zwaenepoel O, Verhelle A, De Ganck A, Gettemans J. 2016. Sci Rep 6: 31177
