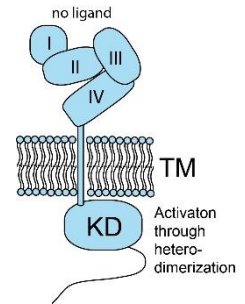


Anti-Epidermal Growth Factor Receptor 2 (HER2) / Neu

Catalogue no.: Q17
Clone name: 11A4

Product: VHH directed against Epidermal Growth Factor Receptor 2 (ErbB2, HER2)/ Neu / CD340

Target: The epidermal growth factor receptor 2 (ErbB2, HER2, Neu), UniProtKB [P04626](#)) is a single membrane spanning receptor tyrosine kinase that is activated by dimerization rather than ligand binding¹. HER2 is one of the 4 ErbB family members and is regarded as a proto-oncogene. It can heterodimerize with any of the other family members and dimerization results in activation and autophosphorylation of the C-terminal tyrosine residues². Overexpression of HER2 is observed in a large number of cancers and therefore serves as a target for tumor-imaging and therapy (e.g. cetuximab)³⁻⁶.



Source: Recombinant monoclonal VHH (*Llama glama*), purified from *S.cerevisiae*. Immunization with MCF7 cells. Phage-display selection on captured HER2 ectodomain with total elution.

Specificity: Human ErbB2/Her2.

Formulation: Frozen 0.2 µm filtered solution of VHH in PBS.

Storage: Shipped on blue ice. Store at 4°C or -20°C (aliquots). Addition of 0.02% sodiumazide is optional.

Applications: ELISA, IF, FACS, EM, *in vivo* imaging

Examples:



Binding of Q17c to human HER2 ectodomain in ELISA or endogenous HER2 on SKBR3 cells in immunofluorescence (green) or transmission electron microscopy imaging Q17-based immuno-gold labeling. Right) *In vivo* imaging of SKBR3-tumors in mice using IRDye-800CW-conjugated Q17c³⁻⁵.

Products:

Cat. No.	Target	Tag	Label
Q17	HER2	Tagless	No label
Q17c	HER2	C-direct	No label
Q17c-lab	HER2	C-direct	Biotin / NOTA / HiLyte488 / IRDye800CW

References:

- [Coussens et al.](#), (1985) Science 230, 1132-1139
- [Schlessinger J.](#), (2000) Cell 103, 211-225
- [Kijanka et al.](#), (2013) Eur J Nucl Med Mol Imaging 40, 17-18-1729
- [Kijanka et al.](#), (2016) EJNMMI Res. 6, 14, doi: 10.1186/s13550-016-0166-y
- [Kijanka et al.](#), (2017) J Struct Biol 199, 1-11
- [Brockhoff et al.](#), (2007) Cell Prolif 40, 488-507