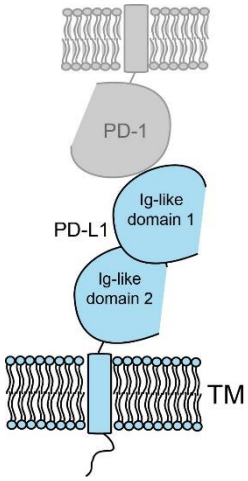
Programmed Death Ligand 1 (PD-L1)

Catalogue no.: **Q89c**
Quantity: **250µg**

Product: **VHH directed against Programmed Death Ligand 1 (PD-L1)**

Target: Human B7 homolog 1 (B7-H1), also called programmed death ligand 1 (PD-L1) (UniProtKB Q9NNZQ7), is one of two ligands for programmed death-1 (PD-1), a member of the CD28 family of immunoreceptors.[2] PD-L1 is a member of the B7 family of immune proteins that can either stimulate or inhibit T cell activity.[1] Other family members include B7-1, B7-2, B7-H2, PD-L2 and B7-H3. B7 proteins have short cytoplasmic domains and 2 Ig-like domains in their extracellular domain.[1,6] PD-L1 expression is upregulated in a small fraction of activated T and B cells and a much larger fraction of activated monocytes. PD-L1 is also found overexpressed in many cancers.[5] Interaction of PD-L1 with PD-1 results in inhibition of TCR-mediated proliferation and cytokine production.[1-3] The PD-L1:PD-1 pathway is involved in the negative regulation of immune responses and may regulate immune tolerance.[3,4]



Source: Recombinant monoclonal VHH (*Llama glama*), purified from *S.cerevisiae*. Immunization with cancer cells. Phage-display selection on recombinant PD-L1 using total elution.

Specificity: Human PD-L1. Q89 does not compete for PD-1 binding.

Formulation: 0.2 µm filtered solution in PBS.
MW: 15.4 kDa, **Ext. Coeff. (ε)$_{280nm}$:** 31065 $M^{-1}\cdot cm^{-1}$, **A_{280} at 1g/L:** 2.0

Storage: Store at 4˚C or -20˚C (aliquots).
Addition of 0.02% sodiumazide is optional.

Applications: ELISA

References:

1 Nishimura, H. and T. Honjo (2001) Trends in Immunology 22:265
2.Freeman, G.J. et al. (2000) J. Exp. Med. 192:1027
3 Latchman, Y. et al. (2001) Nat. Immunol. 2:261
4 Park, J.J. et al. (2010) Blood 116:1291-1298
5 Wang X. et al. (2016) Onco Targets Ther 9:5023-5039
6 Lin D.Y. et al. (2008) Proc Natl Acad Sci U.S.A. 105:3011-3016