Product Sheet





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Yalelaan 1 3584 CL Utrecht The Netherlands +31 30 253 3421

Atypical chemokine receptor 3 (ACKR3/CXCR7)

Catalogue no.: Q126c Clone name: 2A4 / VUN702

Product: VHH directed against ACKR3/CXCR7

Target: The atypical chemokine receptor 3 (ACKR3/CXCR7, UniProtKB P25106) is a 7-

transmembrane spanning class A (rhodopsin-like) G protein-coupled receptor (GPCR). Binding of the chemokines CXCL12/SDF1 α and CXCL11 activates biased signaling via β -arrestin. ACKR3 is expressed in several immune cells and is important for cell migration. Furthermore, it is expressed in the brain, kidneys, heart, and lungs, and plays a role during development. Besides this, ACKR3 is overexpressed in multiple cancer types, including breast-, lung-, and brain cancer, where it is involved in cancer progression and metastasis occurrence. ACKR3 is also involved in several autoimmune diseases and cardiovascular diseases.

Source: Recombinant monoclonal VHH (Llama glama), purified from S. cerevisiae

using affinity chromatography. Immunization with ACKR3-encoding plasmid DNA. Phage-display selection on captured ACKR3-containing

lipoparticles with total elution.6

Specificity: Q126c binds to the extracellular part of human ACKR3 and competes for CXCL11

and CXCL12 binding.1

Formulation: 0.2 μm filtered solution in PBS. The products are equipped with a C-terminal C-

Direct tag with an unpaired cysteine for directional conjugation.

Mol. Weight: 14623.1 kDa **Ext. Coeff. (ε):** 25565 M⁻¹ cm⁻¹

A₂₈₀ at 1 g/L: 1.75

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

Applications: ELISA, IF, antagonism

References:

1 Kleist et al. (2022) Science 377, 222-228.

2 Quinn et al (2018) Cytokine 109, 17-23.

3 Neves et al (2019) Mol Pharmacol 96, 819-825.

4 García-Cuesta et al (2019) Front. Endocrinol 10 585.

5 Duval et al (2022) Front Endocrinol 13 906586.

6 Song et al (2021) EBioMedicine 68 103412.