

#49672 Store at -20°C**XCR1 (D2F8T) & CO-0015-594
SignalStar™ Oligo-Antibody Pair****Cell Signaling**
TECHNOLOGY®**Orders:** 877-616-CELL (2355)
orders@cellsignal.com**Support:** 877-678-TECH (8324)**Web:** info@cellsignal.com
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1 Kit (10 slides)

UniProt ID:
#P46094**Entrez-Gene Id:**
#2829

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For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Item #	Volume	Reactivity	Isotype
XCR1 (D2F8T) Rabbit mAb (SignalStar™ Conjugate 0015)	25185	50 µl	H	Rabbit IgG
Complementary Oligo (CO-0015-594)	58549	22 µl		

Storage

SignalStar conjugates are supplied in PBS (pH 7.2), less than 0.1% sodium azide, 2 mM EDTA, 0.05% Triton X-100, 2 mg/mL BSA, and 50% glycerol. Complementary oligos are supplied in nuclease-free water. Store at -20°C. *Do not aliquot the antibody.* All components in this kit are stable for at least 12 months when stored at the recommended temperature.

Description

SignalStar multiplex immunohistochemistry (IHC) is an advanced technology for labeling multiple proteins simultaneously in tissue samples using specific primary antibodies and fluorescent detection reagents. This technology offers accuracy and reliability in visualizing and analyzing protein expression while maintaining spatial context and tissue architecture.

SignalStar Oligo-Antibody Pairs are compatible with the SignalStar Multiplex IHC Buffer Kits for use in fluorescent multiplex imaging experiments. This product includes the oligo-conjugated antibodies and complementary oligos required for labeling your target protein on up to 10 slides. SignalStar Multiplex IHC Buffer Kits are required to amplify and image the target signal. Multiple oligo-antibody pairs can be conveniently combined into a multiplex panel using the SignalStar Multiplex IHC Panel Builder. SignalStar Multiplex IHC Kits & Reagents are not compatible with all of Cell Signaling Technology® products and protocols that are recommended for use in immunohistochemical assays.

Specificity/Sensitivity

XCR1 (D2F8T) Rabbit mAb (SignalStar™ Conjugate 0015) recognizes endogenous levels of total XCR1 protein by IHC-P and transfected levels of XCR1 protein by western. Staining of unknown specificity in peripheral nerves has been observed by immunohistochemistry.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human XCR1 protein.

Background

X-C motif chemokine receptor 1 (XCR1, GPR5, CCXCR1), part of the G protein-coupled superfamily, is expressed by a subset of dendritic cells and acts as a receptor for chemokines XCL1 and XCL2 (1,2,4). XCR1-positive dendritic cells cross-present antigens to naïve CD8⁺ T cells, priming them to become activated cytotoxic CD8⁺ T cells (3-5). In mouse models, the XCL1-XCR1 signaling axis was shown to be involved in the formation of self-tolerance through the development of T_{reg} cells within the thymus (6).

Background References

1. Yoshida, T. et al. (1998) *J Biol Chem* 273, 16551-4.
2. Fox, J.C. et al. (2015) *Cytokine* 71, 302-11.
3. Dorner, B.G. et al. (2009) *Immunity* 31, 823-33.
4. Kroczyk, R.A. and Henn, V. (2012) *Front Immunol* 3, 14.
5. Bachem, A. et al. (2010) *J Exp Med* 207, 1273-81.
6. Lei, Y. et al. (2011) *J Exp Med* 208, 383-94.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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