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#70575**CD177 (F905U) & CO-0202-594 SignalStar®
Oligo-Antibody Pair****Orders:** 877-616-CELL (2355)
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1 Kit (10 slides)

UniProt ID: #Q8N6Q3
Entrez-Gene Id: #57126

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

Product Includes	Product #	Volume	Reactivity	Isotype
CD177 (F905U) Rabbit Monoclonal Antibody (SignalStar™ Conjugate 0202)	78364	50 µl	H	Rabbit IgG
Complementary Oligo (CO-0202-594)	98233	30 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

CD177 (F905U) Rabbit Monoclonal Antibody (SignalStar™ Conjugate 0202) recognizes endogenous levels of total CD177 protein. Non-specific staining was observed in human normal and neoplastic kidney by immunohistochemistry.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the amino terminus of human CD177 protein.

Background

Cluster of differentiation 177 antigen (CD177, also known as human neutrophil alloantigen 2a and NB1), is a glycosyl-phosphatidylinositol (GPI)-linked N-glycosylated transmembrane protein expressed primarily on the surface of neutrophils (1,2). Expression of CD177 can be induced by granulocyte-colony-stimulating factor and during pregnancy or bacterial infection (3-5). CD177 mediates adhesion and transendothelial migration of neutrophils via interaction with CD31/PECAM-1 and integrin β2 on endothelial cells (6,7). CD177 also promotes the cell surface expression of proteinase 3 (PR3), which may play a role in enhancing endothelial cell junctional integrity and thus vascular integrity during neutrophil diapedesis (8-10). In association with CD11b/ITGAM, integrin β2, and PR3, CD177 promotes activation of TNF-α primed neutrophils including degranulation and superoxide production (11). *CD177* is a polymorphic gene that has been linked to several important clinical diseases, including polycythemia vera, Wegener's granulomatosis, and immune mediated neonatal neutropenia (12-14).

Background References

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7. Bai, M. et al. (2017) *Blood* 130, 2092-100.
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Species Reactivity

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

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