

**PE/iFluor™ 594 Anti-human CD142 Antibody**  
**\*HTF-1\***Catalog number: 114201Y0, 114201Y1, 114201Y2  
Unit size: 25 tests, 100 tests, 500 tests**Product Details**

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Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

**Antibody Properties**

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1 kappa
Immunogen	CD142 (Tissue factor, F3)
Clone	HTF-1
Conjugate	PE/iFluor™ 594

**Biological Properties**

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Preparation	Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 594 under optimal conditions
Application	Flow Cytometry (FACS)

**Spectral Properties**

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Conjugate	PE/iFluor™ 594
Excitation Wavelength	566 nm
Emission Wavelength	606 nm

**Applications**

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HTF-1 is an anti-human monoclonal antibody that is specific for the CD142 antigen. CD142 (sometimes referred to as Tissue factor or F3) is a 45 kD single-pass type I membrane protein that is found on the surface of cells such as endothelial cells, epithelial cells and macrophages. CD142 has been closely linked to key biological processes like blood coagulation, specifically activation of blood coagulation via clotting cascade. Furthermore, it plays a role in vital cellular pathways, in particular, the cytokine-mediated signaling pathway, positive regulation of platelet-derived growth factor receptor signaling pathway and blood coagulation, extrinsic pathway. In certain organisms, CD142 promotes

angiogenesis, upregulates endothelial cell proliferation and is involved in the positive regulation of cell migration. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like factor Xa/TFPI and factor VIIa. CD142 is a relatively rare antibody target, with fewer than 200 publications in the last decade. Even still, CD142 is vital to angiogenesis research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to PE/iFluor™ 594 (ex/em = 566/606 nm). It is compatible with the 561 nm laser and 610/20 nm bandpass filter (for example, as in the BD FACSCelesta™).