

**iFluor™ 610 Anti-human CD142 Antibody**  
**\*HTF-1\***Catalog number: 114200D0, 114200D1  
Unit size: 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	iFluor™ 610

**Biological Properties**

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Appearance	Blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 610 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

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Conjugate	iFluor™ 610
Excitation Wavelength	610 nm
Emission Wavelength	628 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 iFluor™ 610 (ex/em = 610/628 nm). It is compatible with the 592 nm laser and 610/30 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).