

Anti-Human CD366/TIM-3-154Sm

Pathologist-Verified Clone for Imaging Mass Cytometry™

Catalog: 3154024D

Package size and concentration: 25 µg, 0.5 mg/mL

Storage: Store at 4 °C. Do not freeze.

Reactivity: Human

Clone: D5D5R

Isotype: Rabbit IgG

Formulation: Antibody stabilizer with 0.05% sodium azide

Application: IMC-Paraffin

Technical Information

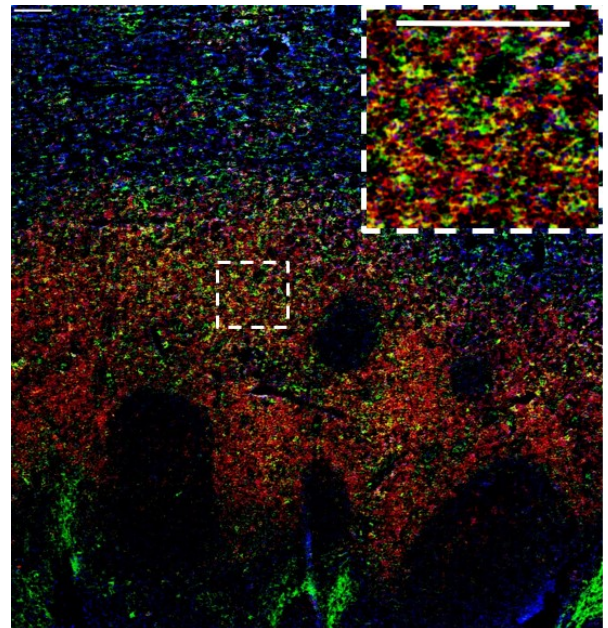
Application: The metal-tagged antibody is designed and formulated for the application of Imaging Mass Cytometry (IMC™) using the Fluidigm Hyperion™ Imaging System on formalin-fixed, paraffin-embedded (FFPE) tissue sections.

Quality control: Each lot of conjugated antibody is quality control-tested by Imaging Mass Cytometry on tissue sections.

Recommended concentration: For optimal performance it is recommended that the antibody be titrated for the desired application. Suggested initial dilution range:
 IMC-Paraffin: 1:50 to 1:200

Description

T cell immunoglobulin and mucin domain-containing molecule 3 (TIM-3) is a type I transmembrane receptor that is constitutively expressed at high levels on NK cells. It is also expressed on specific subsets of CD4+ and CD8+ T cells, on subpopulations of macrophages and DCs and on monocytes, albeit to a lesser extent than on NK cells. TIM-3 was originally identified as a marker of terminally differentiated CD4+ Th1 cells and subsequently associated with T cell exhaustion and impaired virus-specific T cell responses in HIV-1, hepatitis C virus (HCV) and hepatitis B virus (HBV) infection. Three ligands have been described for TIM-3: galectin-9 (Gal-9), cell surface phosphatidylserine and the high-mobility group box 1 (HMGB1) protein. Gal-9 is highly expressed in immune tissues, and engagement of TIM-3 by Gal-9 triggers apoptosis in CD4+ Th1 cells, T cells and thymocytes. TIM-3 signaling on immune cells can trigger either inhibitory or activating signals.



Human tonsil (FFPE) stained with 154Sm-anti-CD366/TIM-3 (D5D5R™) at a dilution of 1:100 (green pseudocolor), 156Gd-anti-CD4 (ERP6855) (red pseudocolor), and iridium DNA intercalator (blue pseudocolor). Heat-mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. Scale bar size = 100 µm.

References

Chang, Q. et al. "Staining of frozen and formalin-fixed, paraffin-embedded tissues with metal-labeled antibodies for imaging mass cytometry analysis." *Current Protocols in Cytometry* 82 (2017): 12.47.1–12.47.8.

Giesen, C. et al. "Highly multiplexed imaging of tumor tissues with subcellular resolution by mass cytometry." *Nature Methods* 11 (2014): 417–22.

For technical support visit <http://techsupport.fluidigm.com>. | For general support visit www.fluidigm.com/support.

For Research Use Only. Not for use in diagnostic procedures.

This product contains antibodies manufactured by and sold under license from CST™ and licensees thereof. Information in this publication is subject to change without notice. **Safety data sheet information:** www.fluidigm.com/sds. **Patent and license information:** www.fluidigm.com/legalnotices. **Limited Use Label License:** The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased consumable or reagent only with Fluidigm Instruments and Systems. **EU's WEEE directive information:** www.fluidigm.com/compliance. Fluidigm, the Fluidigm logo, Hyperion, Imaging Mass Cytometry, and IMC are trademarks or registered trademarks of Fluidigm Corporation in the United States and/or other countries. All other trademarks are the sole property of their respective owners. © 2017 Fluidigm Corporation. All rights reserved. 10/2017