

# Anti-Human CD28 (YTH913.12)-160Gd

## Pathologist-Verified Clone for Imaging Mass Cytometry

Catalog: 3160026D

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

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

Reactivity: Human

Clone: YTH913.12

Isotype: Rat IgG2b

Formulation: Antibody stabilizer with 0.05% sodium azide

Application: IMC frozen

## 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 frozen 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 frozen: 1:25 to 1:100

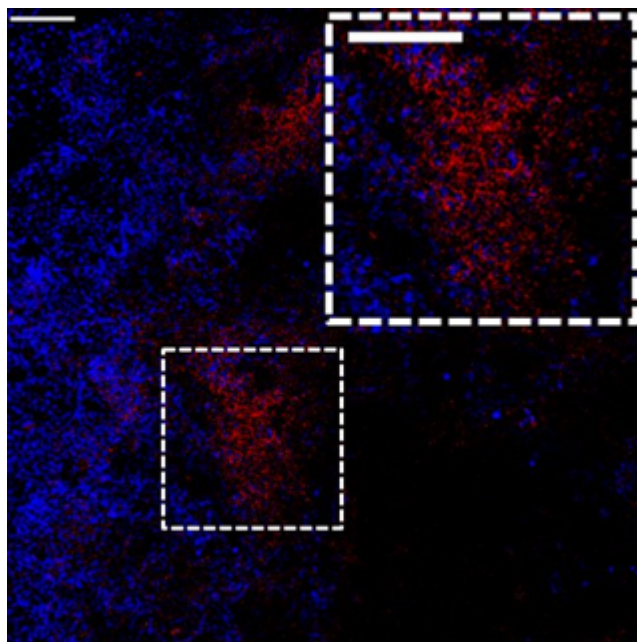
## Description

CD28, also known as T44 or Tp44, is a 44 kDa disulfide-linked homodimeric type I glycoprotein. CD28 binds to CD80 and CD86 and can be expressed on T cells, NK cell subsets, and plasma cells. Expression of CD28 on T cells provides co-stimulatory signals, which are required for T cell activation for the production of various interleukins (IL-2 and IL-6 in particular).

## 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.



Human frozen tonsil stained with 160Gd-anti-CD28 (YTH913.12) at a dilution of 1:50 (red pseudocolor) and iridium DNA intercalator (blue pseudocolor). Tissue section was fixed in 4% paraformaldehyde for 30 minutes at 4 °C. Scale bar size = 100 µm.

**For technical support visit [techsupport.fluidigm.com](https://techsupport.fluidigm.com). | For general support visit [fluidigm.com/support](https://fluidigm.com/support).**

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

This product contains antibodies manufactured by and sold under license from BioLegend® and licensees thereof.

Information in this publication is subject to change without notice. **Safety data sheet information:** [fluidigm.com/sds](https://fluidigm.com/sds). **Patent and license information:** [fluidigm.com/legal/notices](https://fluidigm.com/legal/notices). **Limited Use Label License:** The purchase of this Fluidigm Instrument and/or Consumable product conveys to the purchaser the limited, nontransferable right to use with only Fluidigm Consumables and/or Instruments respectively except as approved in writing by Fluidigm. **Trademarks:** Fluidigm, the Fluidigm logo, Hyperion, Imaging Mass Cytometry, and IMC are trademarks and/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. © 2019 Fluidigm Corporation. All rights reserved. 11/2019