

Cell-ID Intercalator-103Rh

Catalog number, concentration: 201103A, 500 μ M
 201103B, 2,000 μ M

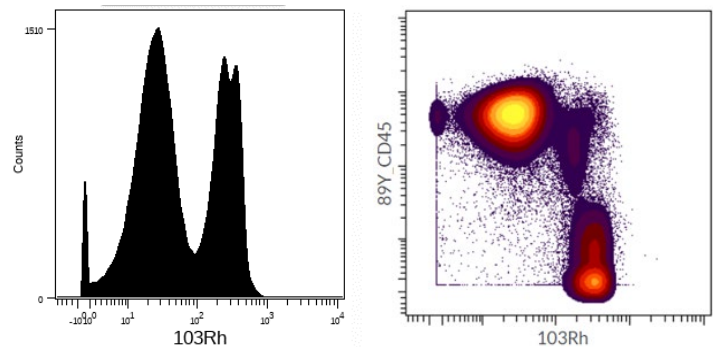
Package size: 500 μ L

Storage: Upon receiving this product, aliquot and freeze at -20 °C. Frozen aliquots should be used only once after thawing.

Application: Cell viability on CyTOF® suspension mass cytometry systems

Technical Information

Description: Cell-ID™ Intercalator-103Rh is a cationic nucleic acid intercalator that contains natural abundance rhodium (103Rh) and is used in CyTOF system analysis to discriminate dead cells from live cells. It is a live-cell membrane-impermeable dye, and therefore when fixed and/or permeabilized cells are stained, all nucleated cells will be stained.



Human PBMC were heat-killed by incubating at 55 °C for 1 hr and then added to live human PBMC stained with anti-CD45 (HI30)-89Y, to distinguish heat-killed (CD45 $-$) and live cells (CD45 $+$). All cells were stained with Cell-ID Intercalator-103Rh. Singlet PBMC events were gated. The histogram (left) and biaxial plot (right) display 103Rh and 194Pt-CD45 expression vs. 103Rh, respectively.

Important Product Notes

- Upon receiving this product, divide into single-use aliquots and freeze them at -20 °C. Frozen aliquots of Cell-ID Intercalator-103Rh should be used only once immediately after thawing to room temperature. Avoid multiple freeze/thaw cycles as this may alter the chemical and cell-binding properties of the reagent.
- We recommend that you determine the optimal staining concentration for Cell-ID Intercalator-103Rh by titrating the reagent at concentrations between 0.5 and 4 μ M. For optimal results with viability staining, titrate using media and cells that you will use in future experiments.
- Cell-ID Intercalator-103Rh staining diminishes with post-barcoding permeabilization protocols that use harsher permeabilization methods, such as methanol, for intracellular marker staining. To ensure discrete live/dead cell discrimination, Cell-ID Cisplatin (201064) or monoisotopic Cell-ID Cisplatin reagents (201194–201196, 201198) are recommended for experiments that require these harsher permeabilization methods.
- Platinum (Pt)-labeled antibodies are compatible with Cell-ID Intercalator-103Rh.
- Cell-ID Intercalator-103Rh can be used for total cell staining if cells are incubated after cell fixation and permeabilization. For more information on this protocol, contact your local Field Applications Specialist.

Viability Staining Protocol

- 1 Use Cell-ID Intercalator-103Rh concurrently with surface marker antibody staining. As with the antibodies used in the cocktail, dilute the pre-titrated amount of Cell-ID Intercalator-103Rh directly into the surface antibody cocktail using Maxpar® Cell Staining Buffer, making sure to account for this reagent volume as if it is another antibody in the cocktail.
- 2 Proceed to use the surface antibody cocktail according to the Maxpar Cell Surface Staining with Fresh Fix Protocol (400276).

References

Ornatsky, O. et al. "Highly multiparametric analysis by mass cytometry." *Journal of Immunological Methods* 361 (2010): 1–20.

Ornatsky, O.I. et al. "Study of cell antigens and intracellular DNA by identification of element-containing labels and metallointercalators using inductively coupled plasma mass spectrometry." *Analytical Chemistry* 80 (2008): 2,539–47.

Safety

Use standard laboratory safety protocols. Read and understand the safety data sheets (SDSs) before handling chemicals. To obtain SDSs, go to fluidigm.com/sds and search for the SDS using either the product name or the part number.

**For technical support visit techsupport.fluidigm.com. | For general support visit fluidigm.com/support.
For Research Use Only. Not for use in diagnostic procedures.**

Information in this publication is subject to change without notice. **Patent and license information:** 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, Cell-ID, CyTOF, and Maxpar are trademarks and/or registered trademarks of Fluidigm Corporation in the United States and/or other countries. © 2021 Fluidigm Corporation. All rights reserved. 05/2021