

***In vivo* labeling of glucose uptake using 2-NBDG**
GMD 2015

Injection buffer (super sterile 1X DPBS)

2-NBDG (Cayman Chemical #11046 – this is the best price we have found)

*** Note that 2-NBDG is not compatible with GFP, YFP, or CFSE, and bleeds heavily into PerCP-Cy5.5 on many cytometers depending on filter set up*

1. Dissolve 2-NBDG in PBS at 5 mM (1.71 mg/mL).
2. Inject via the tail vein 100 uL 5 mM 2-NBDG (500 nmol per injection)
3. Wait 30 minutes prior to mouse sacrifice.
4. Harvest tissues. 2-NBDG remains as a probe in fluorescent cells but still can be metabolized over long periods of time, so you'll want to get from tissues to flow cytometer/microscope as soon as possible.
5. 2-NBDG will stain T cells in two peaks (a low/neg and a high peak) in the FITC channel.
2-NBDG is NOT compatible with permeabilization – fixation is generally okay but you will lose some signal