Staining for Transcription Factors (e-Bioscience)

eBioscience Fixation/Permeabilization Concentrate (cat. 00-5123): 30 ml. Store at 4°C. eBioscience Fixation/Permeabilization Diluent (cat. 00-5223): 100 ml. Store at 4°C. Dilute 1 part Concentrate with 3 parts Diluent to make the Fix/perm buffer. eBioscience Permeabilization/Wash Buffer (10X) (cat. 00-8333): 100 ml. Store at 4°C. Dilute to 1X with deionized/distilled water and store at 4°C.

The Foxp3 Staining Buffer (00-5523-00) has been formulated and optimized for staining against Foxp3 and also other transcription factors such as Nanog, Tbet, Gata-3, Ror gamma as well as cytokines.

- 1. Do surface staining normally. Use (when possible) $1 5x10^6$ cells/wells.
- 2. Prepare the Fix/perm buffer by diluting 1 part Concentrate with 3 parts Diluent. Add Fix/perm buffer in 200ul for 30 min on ice.
- 3. Wash 1x in PBS.
- 4. Prepare the **Permeabilization/Wash Buffer** by diluting to 1X with deionized/distilled water. Wash twice in 200ul **Perm/Wash buffer**.
- 5. Incubate 30min in 50ul FC block at 1/100 with 5% normal mouse serum (NMS) in **Perm/Wash buffer**.

Incubate with anti-transcription factors Ab for 30min on ice diluted in **Perm/Wash buffer**. To do so, without washing add 50ul **Perm/Wash buffer** containing either of the following antibody at the given concentration.

- + Foxp3 Pacific Blue 1/25
- + Helios Pacific Blue 1/10 (weak)
- + Helios PE 1/20
- + GATA-3 PE 1/25
- + GATA-3 Alexa Fluor 600 1/15
- 6. Wash 2x in 200ul Perm/Wash buffer.
- 7. Wash 1x in FACS buffer. Staining is ready and you can go to the flow cytometer.