**DQ-BSA assay.**

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**Abstract**

This protocol describes the DQ BSA assay for measuring the lysosomal proteolytic activity.

**Keywords**

DQ BSA, BSA-488, Lysosomes

**Reagents**

1. DQ BSA - #D12051 (1mg/ml prepared in sterile PBS), working concentration 10 μg/ml.
2. BSA-488 - #A13100 (5mg/ml prepared in sterile PBS), working concentration 5 μg/ml.
3. Mattek glass bottom dishes

**Procedure:**

1. Plate 100,000 mature macrophages or microglia or BMDM were seeded on Mattek glass bottom dishes.
2. Next day treat cells with 50 nM MLi2 or 250 nM LRRK2-IN-1 for 2 hours followed by 1 hour treatment with 10ug/ml DQ-BSA (Thermo Fisher Scientific, #D12051) and 50ug/ml Alexa-488 BSA (Thermo Fisher Scientific #A13100) in the media containing inhibitors.
3. After 3 hours the cells were washed 3X with culture media.
4. Then add 1 ml culture media to the washed cells and return t0 incubator for 10 minutes.
5. Imaging was done on LSM 880