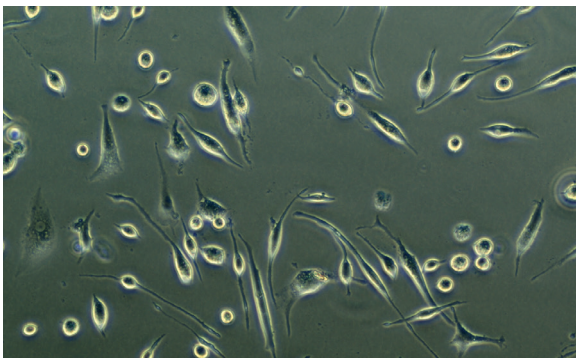


Discover our new Authentic
and Assay-ready Microglial Cells

LB:MiGs

Microglia originate from the yolk sac during development and receive their final priming upon invasion of the central nervous system. LIFE&BRAIN's proprietary derivation protocol recapitulates this developmental cascade, resulting in authentic and fully functional human microglia (**LB:MiGs**). Cryopreserved **LB:MiGs** can be used directly for cellular assays within 24 hours after thawing.

Assay ready cells within 24 hours

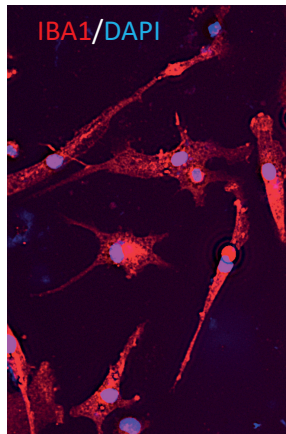
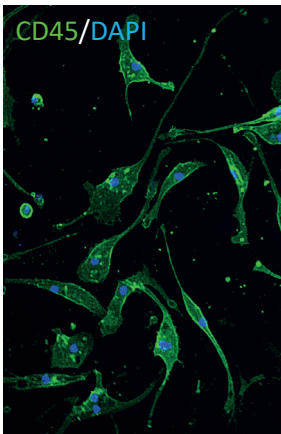


"We used LB:MiGs for an image-based screening project and were impressed by their high quality and batch-to-batch consistency, which ensured reliable and accurate results. Additionally, the excellent support provided by LIFE&BRAIN made the entire process smooth and efficient."

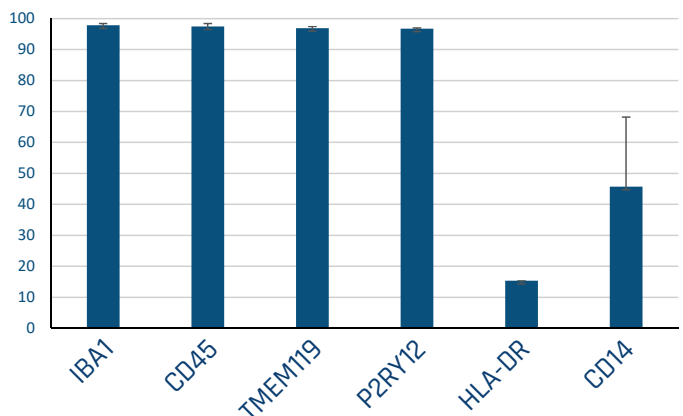
Johannes Wilbertz, PhD, Team Lead; Peter Sommer, PhD, CSO,
KSILINK SAS, Strasbourg

A key advantage of LIFE & BRAIN's **LB:MiGs** is that they are assay-ready just 24 hours after thawing, thereby saving valuable time for research and drug discovery.

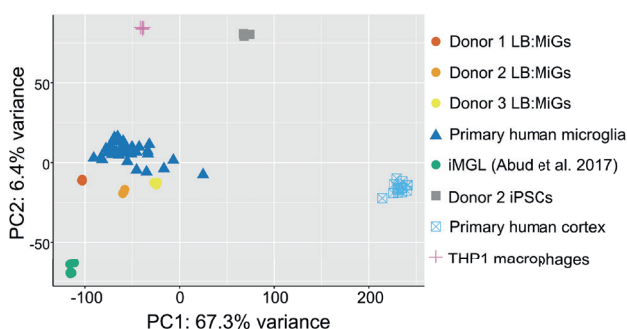
Authentic microglial expression profile



Marker expression (%)

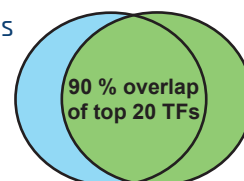


High transcriptomic similarity to primary human microglia



LB:MiGs

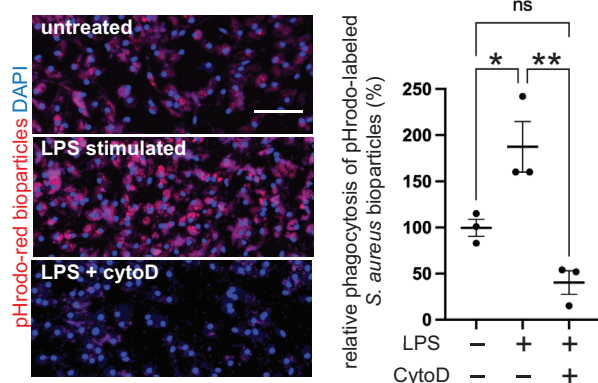
Primary MiGs



Mathews et al., 2022

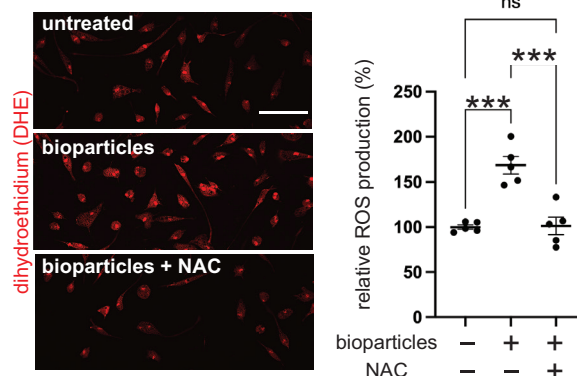
Phagocytosis and redox assays

pHrodo-red bacterial particles



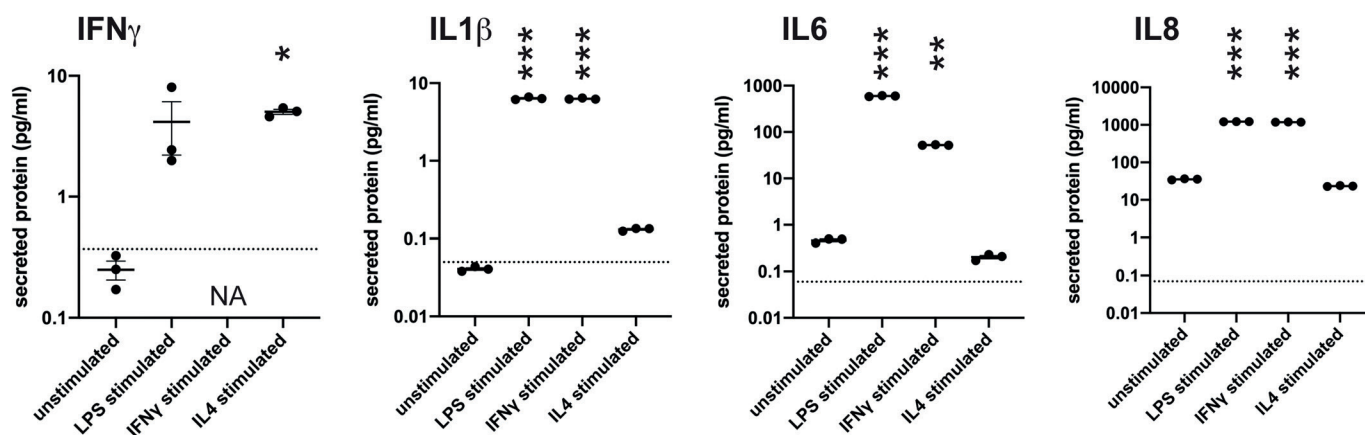
LB:MiGs show constitutive phagocytosis, which is increased by pro-inflammatory stimulation with LPS and completely abolished by co-treatment with an actin polymerization destabilizer.

Reactive oxygen species (ROS)

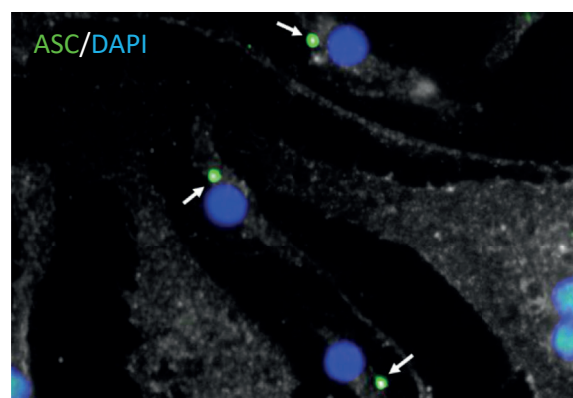


ROS production in LB:MiGs is increased by stimulation with bacterial particles and reduced by co-treatment with the ROS scavenger NAC.

Highly uniform response to inflammatory stimuli

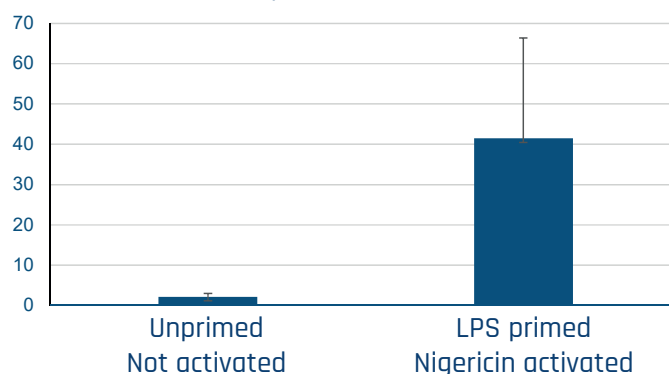


Inflammasome induction



Primed and activated microglia form ASC specks (green) near cell nuclei (blue) through induction of the canonical NLRP3 inflammasome pathway.

ASC speck formation (%)



Customer Information

If you are interested in accessing LIFE & BRAIN's products and services please contact us:

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