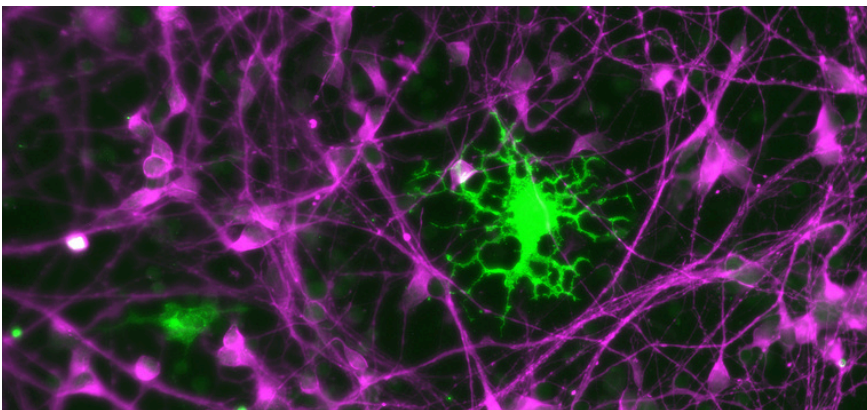
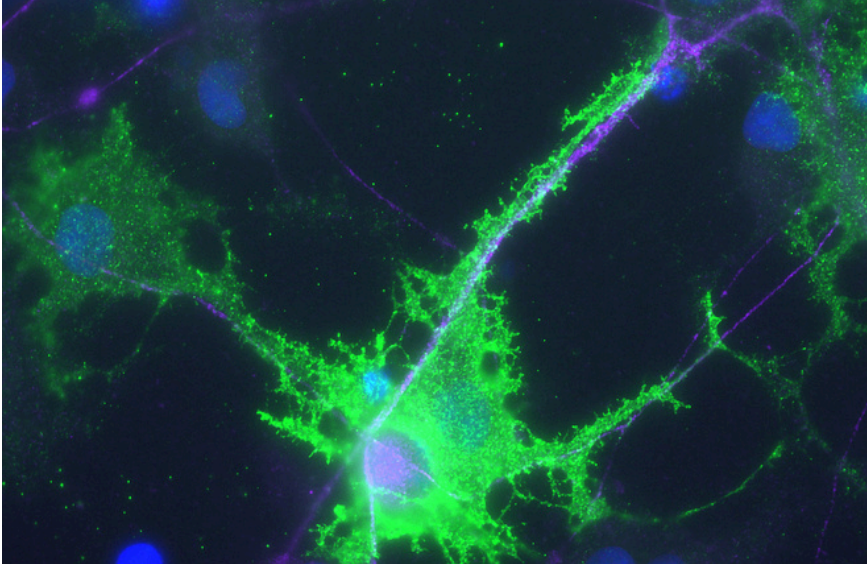




Oligodendrocytes & OPCs

Oligodendrocytes

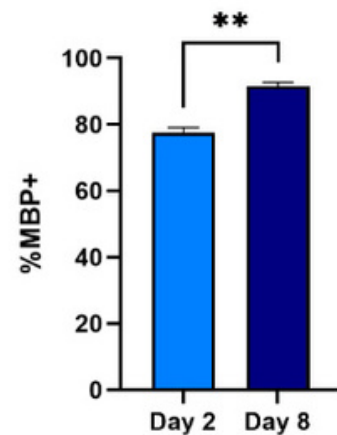
BrainXell utilizes advanced stem cell technology to generate high-quality oligodendrocyte progenitor cells (OPCs) from human induced pluripotent stem cells (hiPSCs). These OPCs rapidly differentiate into O4+ pre-myelinating oligodendrocytes, crucial for myelination and neuronal support. After thawing and plating, the cells quickly mature into myelinating oligodendrocytes within seven days in culture, providing a reliable model for studying myelin formation and potential therapies for demyelinating diseases, such as multiple sclerosis. This streamlined approach ensures a consistent and scalable solution for neurological research.



Purity

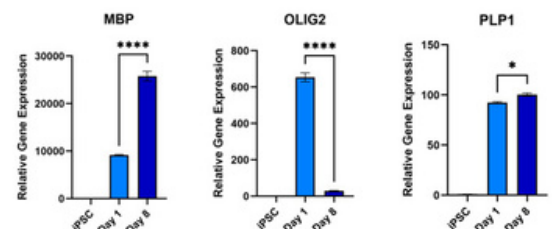
>90% O4+ cells at thaw

>80% MBP by 7 days in culture



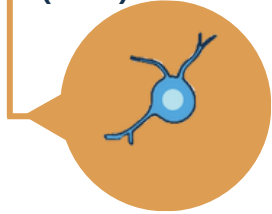
Markers

Expression of oligodendrocyte and myelin markers OLIG2, MBP and PLP1 demonstrate maturity.

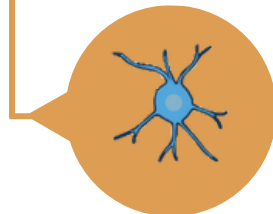


Oligodendrocyte Differentiation

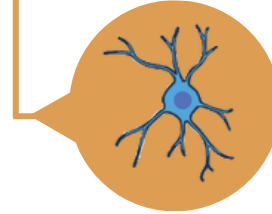
1 Oligodendrocyte Progenitor Cell (OPC)



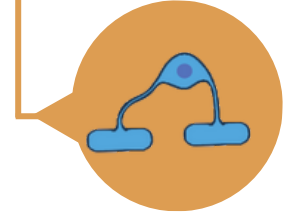
2 Oligodendrocyte Precursor



3 Pre-myelinating Oligodendrocyte



4 Myelinating Oligodendrocyte



MIGRATION



PROLIFERATION



DIFFERENTIATION



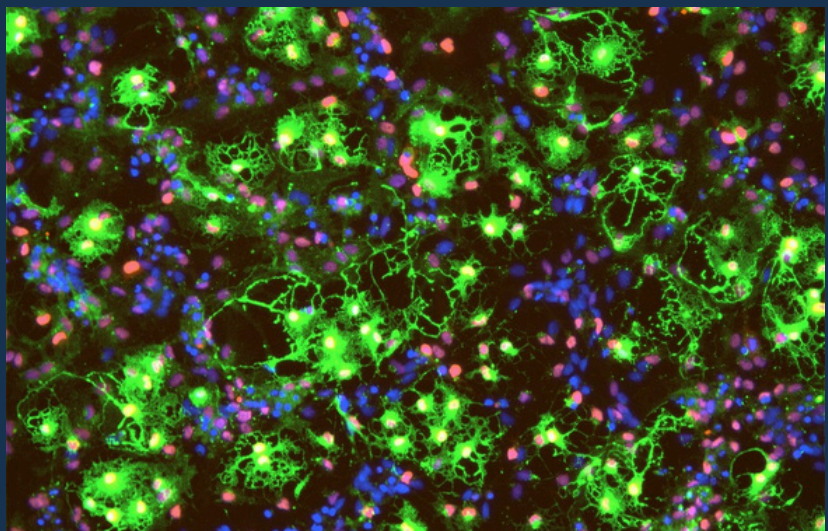
MYELINATION

A2B5, PDGFR α , CSPG4

O4, CNPase, PLP1

MBP, MAG, MOG

SOX10, OLIG 1/2, NKX2.2



CATALOG NUMBER

BX-1300

BX-1400

CELL TYPE

OPCs

Oligodendrocytes

iPSC LINE

WC-30

WC-30

SEX

M

M

Get in Touch

info@brainxell.com

 **BrainXell**
brainxell.com

