

Tagging models	Microglia	BAMs	Prenatal & early postnatal	Adulthood	Remarks	References
<i>Cx3cr1</i> ^{GFP/+}	Yes	Yes	GFP expressed by E9.5	>99%	Targets peripheral immune cells and myeloid BM progenitors	Jung et al., 2000
<i>Cx3cr1</i> ^{creERT2} (1,2)	Yes	Yes	40H-Tam. E9.0: 99% efficiency at E10.5 (2)	>99%	Spontaneous recombination reported	Parkhurst et al., 2013 (1); Yona et al., 2013 (2)
<i>Tmem119</i> ^{eGFP}	Yes	Few	GFP expressed by P1	>99%	Transiently labels blood vessels at P1	Kaiser and Feng, 2019
<i>Tmem119</i> ^{creERT2}	Yes	Few	Tam. P2, P3 & P4: 90% efficiency by P14	>99%	Targets few CD45+ cells in blood	Kaiser and Feng, 2019
<i>Tmem119</i> ^{tdTomato}	Yes	Few	N.A.	>95%		Ruan et al., 2020
<i>Hexb</i> ^{tdTomato}	Yes	Few	TdTomato expressed by E12.5	>99%	Labels few meningeal and perivascular BAMs	Masuda et al., 2020
<i>Hexb</i> ^{creERT2}	Yes	Few	Tam. P1 & P3: 90% efficiency at P42	~80%	Targets peripheral macrophages in kidney	Masuda et al., 2020
<i>P2ry12</i> ^{creERT2}	Yes	Few	Tam. E13.5, E15.5 & E17.5: robust efficiency by E18.5 in microglia and subsets of BAMs (40% in choroid plexus, 10% in meninges, few PVM)	90-95%	Targets 20-25% of BAMs in choroid plexus and meninges	McKinsey et al., 2020
<i>Sall1</i> ^{GFP}	Yes	No	GFP expressed in 20% microglia by E12.5, 69% by E14.5, 90% by P2	>95%	Targets <10% other CNS cells	Buttgereit et al., 2016; Utz et al., 2020
<i>Sall1</i> ^{creERT2}	Yes	No	Tam. E14.5 & E16.5: 75% efficiency at E18.5	>95%	Targets <10% other CNS cells	Buttgereit et al., 2016; Utz et al., 2020
<i>Cx3cr1</i> ^{ccre} ; <i>Sall1</i> ^{ncre}	Yes	No	N.A.	~90%		Kim et al., 2021
<i>Cx3cr1</i> ^{ccre} ; <i>Lyve1</i> ^{ncre}	No	Yes	N.A.	20% of Lyve1+ cells		Kim et al., 2021
<i>Lyve1</i> ^{CreERT2}	No	Yes	40H-Tam. E16.5: 50% efficiency in meningeal and perivascular macrophages at P14	N.A.	Targets lymphatic endothelial cells	Masuda et al., 2022
<i>Siglec1</i> ^{cre}	No	Yes	Efficiently floxes gene in BAMs at E18.5	N.A.	<i>Siglec1</i> expressed by 60% BAMs at E14.5, 100% at E18.5	Utz et al., 2020
<i>Pf4</i> -Cre	Few	Yes	N.A.	>99%		McKinsey et al., 2020
<i>Mrc1</i> ^{CreERT2}	No	Yes	40H-Tam. E9.0: 10% efficiency in BAMs & 5% in microglia by E18.5	>95%		Masuda et al., 2022
Adenoviruses	Yes	N.A.	N.A.	80 % efficiency		Lin et al., 2022
Depletion models	Microglia	BAMs	Prenatal & early postnatal	Adulthood	Remarks	References
Killing by numbers						
<i>Cx3cr1</i> ^{CreER} ; <i>R26</i> ^{DTA}	Yes	Yes	N.A.	>99%	85% depletion remaining 7 days after DT treatment	Parkhurst et al., 2013
<i>IBA1</i> ; <i>tTA</i> ; <i>DTA</i> ; <i>Cre</i>	Yes	Yes	Withdrawal of doxycycline from maternal diet from P5: 50% depletion at P8 (1)	~90% in retina (2)	Microglia are back to control level 4 days after Doxycyclin return (1)	Miyamoto et al., 2016 (1); Takeda et al., 2018 (2)
<i>Siglech</i> ^{DTA}	Yes	No	Injection at E10.5: 80% depletion at E12.5, 60% at E14.5 (1)	80-85% (2)	Microglia are back to control level by E16.5 (1)	Li et al., 2021 (1); Konoshi et al., 2017 (2)
CSF-1R inhibitors						
Anti CSF-1R antibodies	Yes	Yes	Injections at E6 & E7: >98% depletion at E14.5 (1)	No effect (2)	Microglia are back to control level by P7 (1)	Squarzone et al., 2014 (1); MacDonald et al., 2010 (2)
Anti CSF-1 antibodies	Yes	No	Injections at E6 & E7: >50% depletion at P0.5	60% in white matter region	Dose-dependent efficiency	Easley-Neal et al., 2019
Anti IL-34 antibodies	Yes	No	Injections at E6 & E7: no effect at P0.5. Injection at P0.5: 30% depletion at P4	50% in grey matter region	Dose-dependent efficiency	Easley-Neal et al., 2019
PLX5622	Yes	Yes	Chow PLX from E3.5: 99% depletion at E15.5 (1); daily i.g. inj. (P1-P7) followed by i.p. inj. until P18: >95% depletion P8-P15 (90% at P4) (2)	>95% within 7 days (3)	Microglia are back to control level by P4 in hypothalamus (1)	Rosin et al., 2018 (1); Favuzzi et al., 2021 (2); Huang et al., 2018 (3)
PLX3397	Yes	Yes	Chow PLX from E14 followed by s.c. injections in pups: 90% depletion at P5 in spinal cord (1)	>99% within 7 days (2)	Microglia are over control level 7 days after PLX removal (2)	Li et al., 2020 (1); Elmore et al., 2014 (2)
Genetic models						
<i>Pu.1</i> ^{-/-}	Yes	Yes	100%	100%	Homozygotes die shortly after birth	McKercher et al., 1996
<i>Csf1</i> ^{op/op}	Yes	Yes	N.A.	0 (1) to 64% (2)	Peripheral impact	Chang et al., 1994 (1); Kondo and Duncan, 2009 (2)
<i>Il34</i> ^{LacZ/LacZ} (1,2)	Yes	N.A.	95% decrease at P2 (1); normal colonization of the brain from E10.5 to newborn (2)	50% (1; 2)	Peripheral impact	Wang et al., 2012 (1); Greter et al., 2012 (2)
<i>Csf1r</i> ^{-/-}	Yes	Yes	>99%	100%	Shortened lifespan & abnormal brain development	Erblich et al., 2011
<i>Sall1</i> ^{CreER} ; <i>Csf1r</i> ^{fl/fl}	Yes	No	N.A.	70-90%	Spatial variability in efficiency	Buttgereit et al., 2016
<i>Hexb</i> ^{CreERT2} ; <i>Csf1r</i> ^{fl/fl}	Yes	No	N.A.	60%		Masuda et al., 2020
<i>Csf1r</i> ^{ΔFIRE/ΔFIRE}	Yes	Few	Absence of Kolmer's cells in the choroid plexus, other BAMs reduced	100%		Rojo et al., 2019; Munro et al., 2020
<i>Nestin</i> ^{cre} ; <i>Csf1</i> ^{fl/fl}	Yes	N.A.	60% decrease in E17.5 cerebellum	~50% in cerebellum		Kana et al., 2019
<i>Nestin</i> ^{cre} ; <i>Il34</i> ^{fl/fl}	Yes	N.A.	N.A.	~85% in striatum		Badimon et al., 2020