

**Table S2: Antibodies**

<b>Antibody</b>	<b>Protein</b>	<b>Host</b>	<b>Use</b>	<b>Reference</b>	<b>Company</b>
<b>Anti-AGAT</b>	Glycine amidinotransferase	Rabbit, pAb	WB (1:1000)	12801-1-AP	Proteintech
<b>Anti-CV-ATP5<math>\alpha</math></b>	ATP synthase alfa subunit	Mouse, mAb	WB (1:1000) IF (1:500)	ab14748	Abcam
<b>Anti-GAPDH</b>	Glyceraldehyde-3-phosphate dehydrogenase	Mouse, mAb	WB (1:5000)	ab8245	Abcam
<b>Anti-GCSH</b>	Glycine cleavage system protein H	Rabbit, pAb	WB (1:1000); IF (1:500)	16726-1-AP	Proteintech
<b>Anti-GCSP</b>	Glycine decarboxylase	Mouse, pAb	WB (1:2000) IF (1:200)	NBP1-32907	Novus Biological
<b>Anti-GCST</b>	Aminomethyltransferase	Mouse, pAb	WB (1:500)	NBP1-89783	Novus Biological
<b>Anti-GFAP</b>	Glial fibrillary acidic protein	Mouse, mAb	IF (1:50)	3670S	Cell Signalling
<b>Anti-GLAST1</b>	Solute carrier family 1 member 3	Rat, pAb	IF (1:40)	-	-
<b>Anti-GLT-1</b>	Solute carrier family 2 member 1	Rat, pAb	IF (1:40)	-	-
<b>Anti-MAP2</b>	Microtubule-associated protein 2	Mouse, mAb	IF (1:100)	M1406	Sigma Aldrich
<b>Anti-Nestin</b>	Nestin	Mouse, mAb	IF (1:100)	ab18102	Abcam
<b>Anti-OCT3/4</b>	POU class 5 homeobox 1	Mouse, mAb	IF 1:60	sc-5279	Santa Cruz Biotechnology
<b>Anti-OxPhos</b>	CI-NDUFB8, CII-SDHB, CIII-UQCRC1, CIV-MTCOI, CV-ATP5A	Mouse, mAb	WB (1:500)	ab110413	Abcam

<b>Anti-PAX6</b>	Paired box 6 protein	Rabbit, pAb	IF (1:100)	GTX113241	GeneTex
<b>Anti-PHGDH</b>	Phosphoglycerate dehydrogenase	Rabbit, pAb	WB (1:1000)	14719-1-AP	Proteintech
<b>Anti-PSAT1</b>	Phosphoserine aminotransferase 1	Rabbit, pAb	WB (1:1000)	10501-1-AP	Proteintech
<b>Anti-PSPH</b>	Phosphoserine phosphatase	Rabbit, pAb	WB (1:1000)	14513-1-AP	Proteintech
<b>Anti-S100β</b>	S100 calcium-binding protein β	Rabbit, mAb	IF (1:50)	ab52642	Abcam
<b>Anti-SHMT1</b>	Serine hydroxymethyltransferase 1	Rabbit, pAb	WB (1:1000)	14149-1-AP	Proteintech
<b>Anti-SHMT2</b>	Serine hydroxymethyltransferase 2	Rabbit, pAb	WB (1:1000)	11099-1-AP	Proteintech
<b>Anti-SRR</b>	Serine racemase	Rabbit, pAb	WB (1:1000)	17955-1-AP	Proteintech

### Secondary Antibodies

Antibody	Protein	Host	Use	Reference	Company
<b>Alexa 488 Anti-rabbit-IgG</b>	Rabbit IgG	Donkey	IF 1:500	A-21206	ThermoFisher
<b>Alexa 555 Anti-mouse-IgG</b>	Mouse IgG	Donkey	IF 1:500	A-31570	ThermoFisher
<b>Anti-rabbit-IgG-HRP</b>	Rabbit IgG	Goat	WB, BN-WB (1:5000)	7074S	Cell Signalling
<b>Anti-mouse-IgG-HRP</b>	Mouse IgG	Horse	WB, BN-WB (1:2000)	7076S	Cell Signalling

**WB:** Western blot; **IF:** Immunofluorescence; **BN-WB:** Blue Native Western blot; **pAb:** Polyclonal antibody; **mAb:** Monoclonal antibody