

## **$\beta$ -hydroxybutyrate oxidation promotes the accumulation of immunometabolites in activated microglia cells**

### **Supplementary Methods**

<b>Metabolite</b>	<b>RT</b>	<b>m/z range</b>	<b>Formula</b>
Pyruvic acid	10.39	174-177	C <sub>3</sub> H <sub>4</sub> O <sub>3</sub>
Lactic acid	13.30	261-264	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>
Alanine	13.88	260-263	C <sub>3</sub> H <sub>7</sub> NO <sub>2</sub>
Glycine	14.20	246-248	C <sub>2</sub> H <sub>5</sub> NO <sub>2</sub>
Valine	15.24	288-293	C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub>
Leucine	16.09	302-308	C <sub>6</sub> H <sub>13</sub> NO <sub>2</sub>
Isoleucine	16.10	302-308	C <sub>6</sub> H <sub>13</sub> NO <sub>2</sub>
Succinic acid	16.49	289-293	C <sub>4</sub> H <sub>6</sub> O <sub>4</sub>
Fumaric acid	16.84	287-291	C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>
Glycerol	17.60	377-380	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>
Pyroglutamic acid	18.42	300-305	C <sub>5</sub> H <sub>7</sub> NO <sub>3</sub>
Methionine	18.56	320-325	C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub> S
Serine	18.71	390-393	C <sub>3</sub> H <sub>7</sub> NO <sub>3</sub>
$\alpha$ -Ketoglutaric acid	18.92	346-351	C <sub>5</sub> H <sub>6</sub> O <sub>5</sub>
Threonine	19.00	404-408	C <sub>4</sub> H <sub>9</sub> NO <sub>3</sub>
Phenylalanine	19.73	336-345	C <sub>9</sub> H <sub>11</sub> NO <sub>2</sub>
Malic acid	19.88	419-423	C <sub>4</sub> H <sub>6</sub> O <sub>5</sub>
Aspartic acid	20.28	418-422	C <sub>4</sub> H <sub>7</sub> NO <sub>4</sub>
Glutamic acid	21.34	432-437	C <sub>5</sub> H <sub>9</sub> NO <sub>4</sub>
Dihydroxyacetone phosphate	22.05	484-487	C <sub>3</sub> H <sub>7</sub> O <sub>6</sub> P
Lysine	22.29	431-437	C <sub>6</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub>
Glutamine	22.65	431-436	C <sub>5</sub> H <sub>10</sub> N <sub>2</sub> O <sub>3</sub>
Glycerol-3-phosphate	23.38	571-574	C <sub>3</sub> H <sub>9</sub> O <sub>6</sub> P
Citric acid	24.05	591-597	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>
Tyrosine	24.33	466-475	C <sub>9</sub> H <sub>11</sub> NO <sub>3</sub>

Table of metabolites detected by GC-MS. Retention times (RT) may vary depending on chromatographic conditions.