Lysine	Heavy Isotopes	Abbreviation	Mass (Da)
light	<sup>13</sup> C <sub>0</sub> <sup>2</sup> H <sub>0</sub> <sup>15</sup> N <sub>0</sub>	K <sub>000</sub>	146.1055
medium	<sup>13</sup> C <sub>0</sub> <sup>2</sup> H <sub>4</sub> <sup>15</sup> N <sub>0</sub>	K <sub>040</sub>	150.1306
heavy 1	<sup>13</sup> C <sub>6</sub> <sup>2</sup> H <sub>0</sub> <sup>15</sup> N <sub>2</sub>	K <sub>602</sub>	154.1197
heavy 2	<sup>13</sup> C <sub>4</sub> <sup>2</sup> H <sub>2</sub> <sup>15</sup> N <sub>2</sub>	K <sub>422</sub>	154.1255
heavy 3	<sup>13</sup> C <sub>5</sub> <sup>2</sup> H <sub>2</sub> <sup>15</sup> N <sub>1</sub>	K <sub>521</sub>	154.1319
heavy 4	<sup>13</sup> C <sub>3</sub> <sup>2</sup> H <sub>4</sub> <sup>15</sup> N <sub>1</sub>	K <sub>341</sub>	154.1377
heavy 5	<sup>13</sup> C <sub>4</sub> <sup>2</sup> H <sub>4</sub> <sup>15</sup> N <sub>0</sub>	K <sub>440</sub>	154.1440
heavy 6	<sup>13</sup> C <sub>0</sub> <sup>2</sup> H <sub>8</sub> <sup>15</sup> N <sub>0</sub>	K <sub>080</sub>	154.1557

**Supplemental Table 1.** Lysine variants used in these experiments.