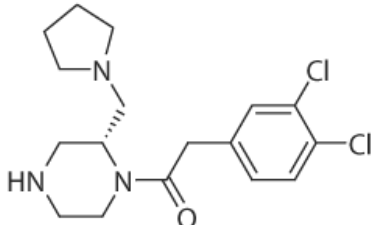


Catalogue Number	Product	Order number / Unit
2060	<p><b>(S)-(-)-Normethylcarbamoyl-GR 103545</b>  <b>Precursor for (R)-(-)-[<sup>11</sup>C]-GR 103545</b></p> <p><b>Molar Mass:</b> 356.29            C<sub>17</sub>H<sub>23</sub>Cl<sub>2</sub>N<sub>3</sub>O            [260992-21-0]            Yellowish oil packaged in dark glass crimp cap vials.</p> <p><b>Purity:</b> &gt; 95 %</p> <p><b>Certificates:</b>            CoA; <sup>1</sup>H and <sup>13</sup>C NMR spectra</p> <p><b>Chemical Name:</b>            CA index name: Ethanone, 2-(3,4-dichlorophenyl)-1-[(2S)-2-(1-pyrrolidinylmethyl)-1-piperazinyl]-</p> <p><b>Synonyms:</b>            (2S)-2-(3,4-Dichlorophenyl)-1-(2-pyrrolidin-1-ylmethyl-piperazine-1-yl)-ethanon;            (2S)-1-[(3,4-Dichlorophenyl)acetyl]-2-(1-pyrrolidinylmethyl)piperazine</p> <p><b>Literature:</b>            Ravert H.T. et al. [<sup>11</sup>C]-GR 89696, a potent kappa opiate receptor radioligand; in vivo binding of the R and S enantiomers. <i>Nuc. Med. Biol.</i> 2002, 29, 47-53.            Talbot P.S. et al. <sup>11</sup>C-GR 103545, a Radiotracer for Imaging κ-Opioid Receptors In Vivo with PET: Synthesis and Evaluation in Baboons. <i>J. Nucl. Med.</i> 2005, 46, 484-494.            Naylor A. et al. A Potent New class of κ-Receptor Agonist: 4-Substituted 1-(Arylacetyl)-2-[(dialkylamino) methyl]piperazines. <i>J. Med. Chem.</i> 1993, 36, 2075-2083.            Schoultz B.W. et al. A New Method for Radiosynthesis of <sup>11</sup>C-Labeled Carbamate Groups and its Application for a Highly Efficient Synthesis of the Kappa-Opioid Receptor Tracer [<sup>11</sup>C]GR 103545. <i>The Open Med. Chem. J.</i> 2008, 2, 72-74.            Nabulsi N.B. et al. [<sup>11</sup>C]GR103545: novel one-pot radiosynthesis with high specific activity. <i>Nucl. Med. Biol.</i> 2011, 38, 215-21.</p>	<p>2060.0001: 1 mg per vial            2060.0003: 3 mg per vial            2060.0010: 10 mg per vial  <b>Please inquire for customized filling and bulk quantities.</b></p> 

date of product catalogue issue: 10 May 2017