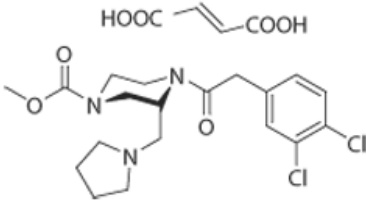


Catalogue Number	Product	Order number / Unit
<b>2070</b>	<b>GR89696 fumarate</b> <b>Reference standard for (R)-(-)-[<sup>11</sup>C]GR103545 and (S)-(+)-[<sup>11</sup>C]GR103545</b> <b>Highly potent and selective κ opioid receptor agonist</b> <b>Molar Mass:</b> 530.40 $C_{19}H_{25}Cl_2N_3O_3 \cdot C_4H_4O_4$ [126766-32-3] Off-white solid packaged in dark glass crimp cap vials. <b>Purity:</b> > 95 % <b>Certificates:</b> CoA; <sup>1</sup> H NMR and <sup>13</sup> C NMR spectra <b>Chemical Name:</b> CA index name: 1-Piperazinecarboxylic acid, 4-[(3,4-dichlorophenyl)acetyl]-3-(1-pyrrolidinylmethyl)-, methyl ester, (E)-2-butenedioate (1:1) <b>Synonymes:</b> GR89696 fumarate salt; 4-[(3,4-dichlorophenyl)acetyl]-3-(1-pyrrolidinylmethyl)-1-piperazinecarboxylic acid methyl ester fumarate <b>Literature:</b> 1. Ravert H.T. et al. [ <sup>11</sup> C]-GR89696, a potent kappa opiate receptor radioligand; in vivo binding of the R and S enantiomers. <i>Nuc. Med. Biol.</i> 2002, 29, 47-53. 2. Talbot P.S. et al. <sup>11</sup> C-GR103545, 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. 3. 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. 4. 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]GR103545. <i>The Open Med. Chem. J.</i> 2008, 2, 72-74.	2070.0001: 1 mg per vial 2070.0005: 5 mg per vial 2070.0010: 10 mg per vial Please inquire for customized filling and bulk quantities. 

date of product catalogue issue: 05 April 2012