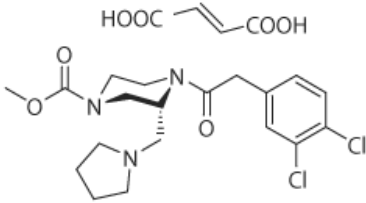


Catalogue Number	Product	Order number / Unit
2071	(R)-(-)-GR103545 fumarate Reference standard for (R)-(-)-[¹¹C]GR103545 Active enantiomer of the selective kappa opioid receptor agonist GR89696 Molar Mass: 530.40 $C_{19}H_{25}Cl_2N_3O_3 \cdot C_4H_4O_4$ [126766-43-6] Off-white solid packaged in dark glass crimp cap vials. Purity: > 95 % Certificates: CoA; ¹ H and ¹³ C NMR spectra Chemical Name: 1-Piperazinecarboxylic acid, 4-[(3,4-dichlorophenyl)acetyl]-3-(1-pyrrolidinylmethyl)-, methyl ester, (R)-, (E)-2-butenedioate (1:1) Synonymes: (R)-(-)-GR103545 fumarate salt; (R)-4-[(3,4-dichlorophenyl)acetyl]-3-(1-pyrrolidinylmethyl)-1-piperazinecarboxylic acid methyl ester fumarate Literature: Ravert H.T. et al. [¹¹ 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. ¹¹ 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 ¹¹ C-Labeled Carbamate Groups and its Application for a Highly Efficient Synthesis of the Kappa-Opioid Receptor Tracer [¹¹ C]GR 103545. <i>The Open Med. Chem. J.</i> 2008, 2, 72-74.	2071.0001: 1 mg per vial 2071.0005: 5 mg per vial 2071.0010: 10 mg per vial Please inquire for customized filling and bulk quantities. 

date of product catalogue issue: 10 May 2017