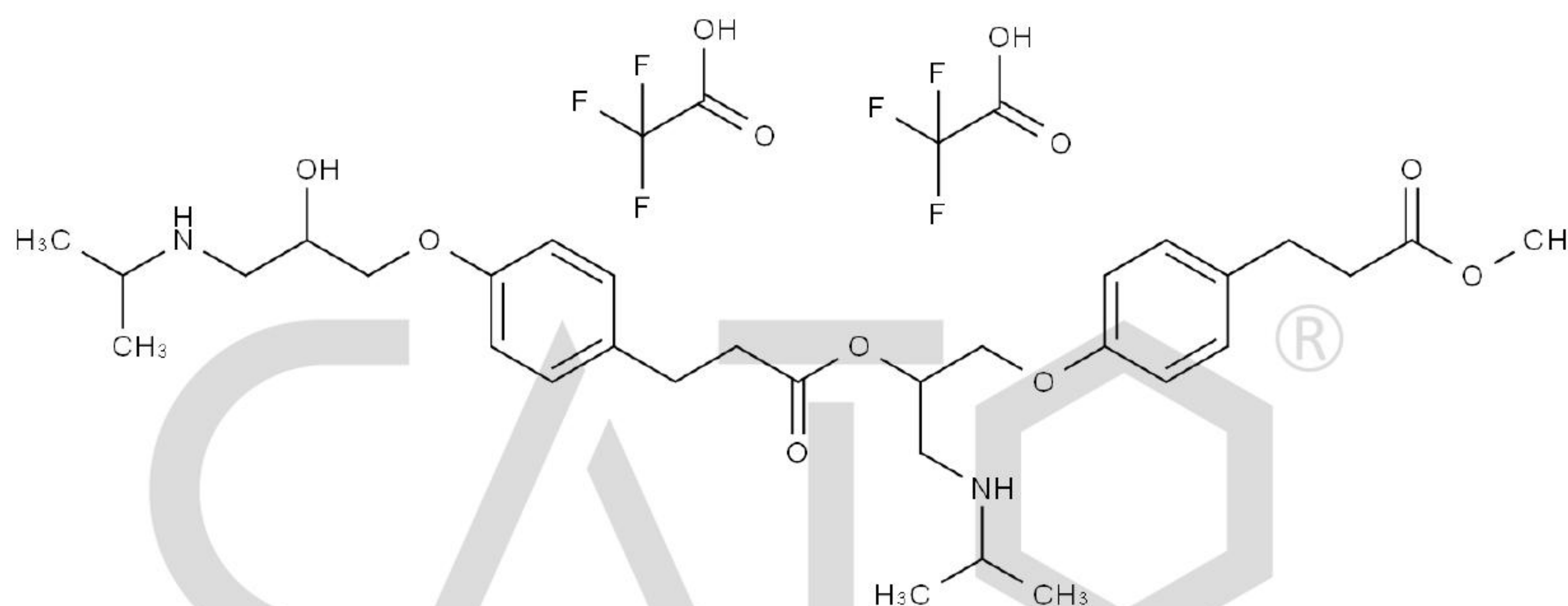


Certificate of Analysis

Reference Material & Standard

Product Name:	Esmolol Impurity 9	Catalogue Number:	C4X-18919
Synonyms:	N/A	Lot Number:	1208-RG-0050
CAS Number:	N/A	Expiry Date:	Mar 06, 2029
Molecular Formula:	$C_{31}H_{46}N_2O_7 \cdot 2 \cdot C_2HF_3O_2$	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	558.71 2*114.02	Shipping Condition:	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Brown Gel
Identification	LCMS&UV&HNMR	Confirmed
Purity	HPLC	96.856%
Water Content	Karl Fischer	1.45%
Residual Solvents	NMR	0.43% acetonitrile
Assay		95.0%

Comment:

The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Water Content - Residual Solvents) * Purity HPLC (%) / 100%

Water Content and Residual Solvents are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Reviewed by:

Approved by General Manager:

Date: Dec 14, 2025

Date: Dec 15, 2025

Date: Dec 15, 2025



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