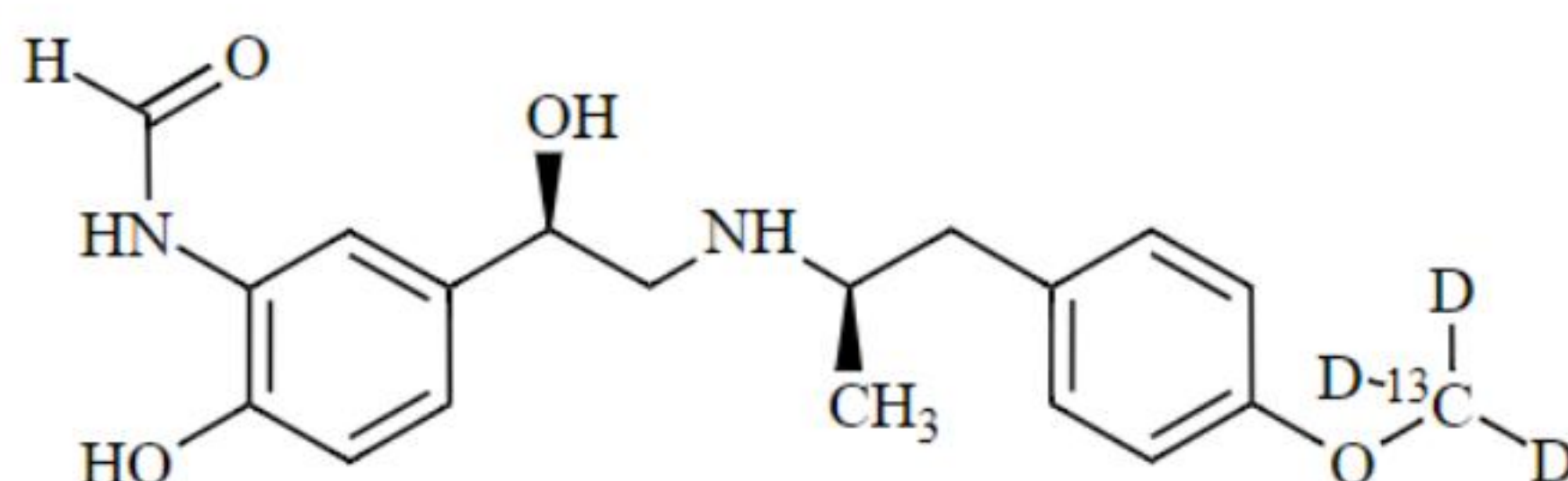


Certificate of Analysis

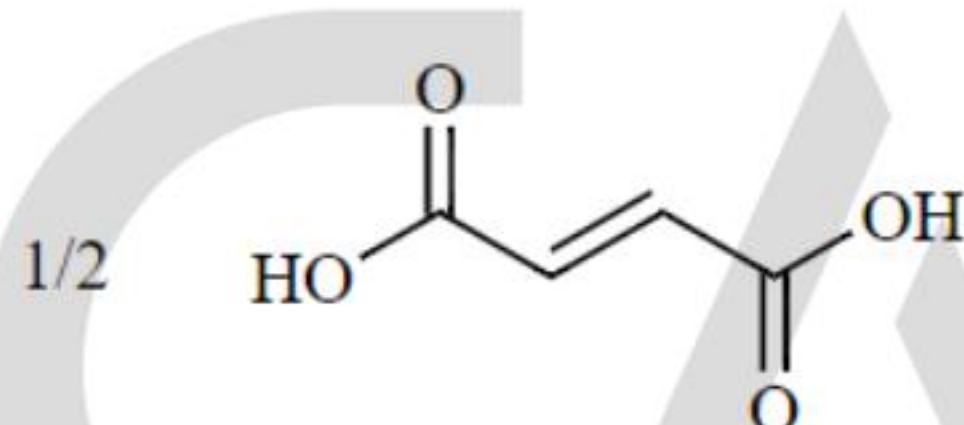
Reference Material & Standard

Product Name:	Formoterol-13C-d3 Hemifumarate	Catalogue Number:	C4X-152545
Synonyms:	N/A	Lot Number:	0826-RF-0046
CAS Number:	N/A	Expiry Date:	Apr 02, 2027
Molecular Formula:	C18[13C]H21D3N2O4 0.5 C4H4O4	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	348.42 0.5*116.07		



Chemical Structure:

and enantiomer



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification	LCMS&IR&HNMR	Confirmed
Chemical Purity	HPLC	98.9105%
Isotopic Purity		99.0% D;99.0% 13C
Water Content	Karl Fischer	0.70%
Residual Solvents	NMR	0.9% ethyl acetate
Assay		97.3%

Comment:

The calculation of the 100% 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:

Lily

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Aug 26, 2024

Date: Aug 26, 2024

Date: Aug 26, 2024

