

“Influence of indomethacin on steroid metabolism: Endocrine disruption and confounding effects in urinary steroid profiling of anti-doping analyses”

Supplement S1: Chromatograms of in vitro qualitative incubation

Anna Stoll¹, Michele Iannone², Giuseppina De Gregorio², Francesco Molaioni², Xavier de la Torre², Francesco Botrè^{2,3} and Maria Kristina Parr^{1,*}

¹ Freie Universität Berlin, Institute of Pharmacy (Pharmaceutical and Medical Chemistry), 14195 Berlin, Germany; anna.stoll@fu-berlin.de (A.S.); maria.parr@fu-berlin.de (M.K.P.)

² Laboratorio Antidoping Federazione Medico Sportiva Italiana, 00197 Rome, Italy; micheleiannone14@gmail.com (M.I.); degregorio.giuseppina@gmail.com (G.D.G.); molaioni@gmail.com (F.M.); xavier.delatorre@gmail.com (X.T.)

³ ISSUL – Institute del sciences du sport, Université de Lausanne, Synathlon – Quartier Centre, 1015 Lausanne, Switzerland; Francesco.Botre@unil.ch (F.B.)

* Correspondence: maria.parr@fu-berlin.de; Tel.: +49-30-838-51471

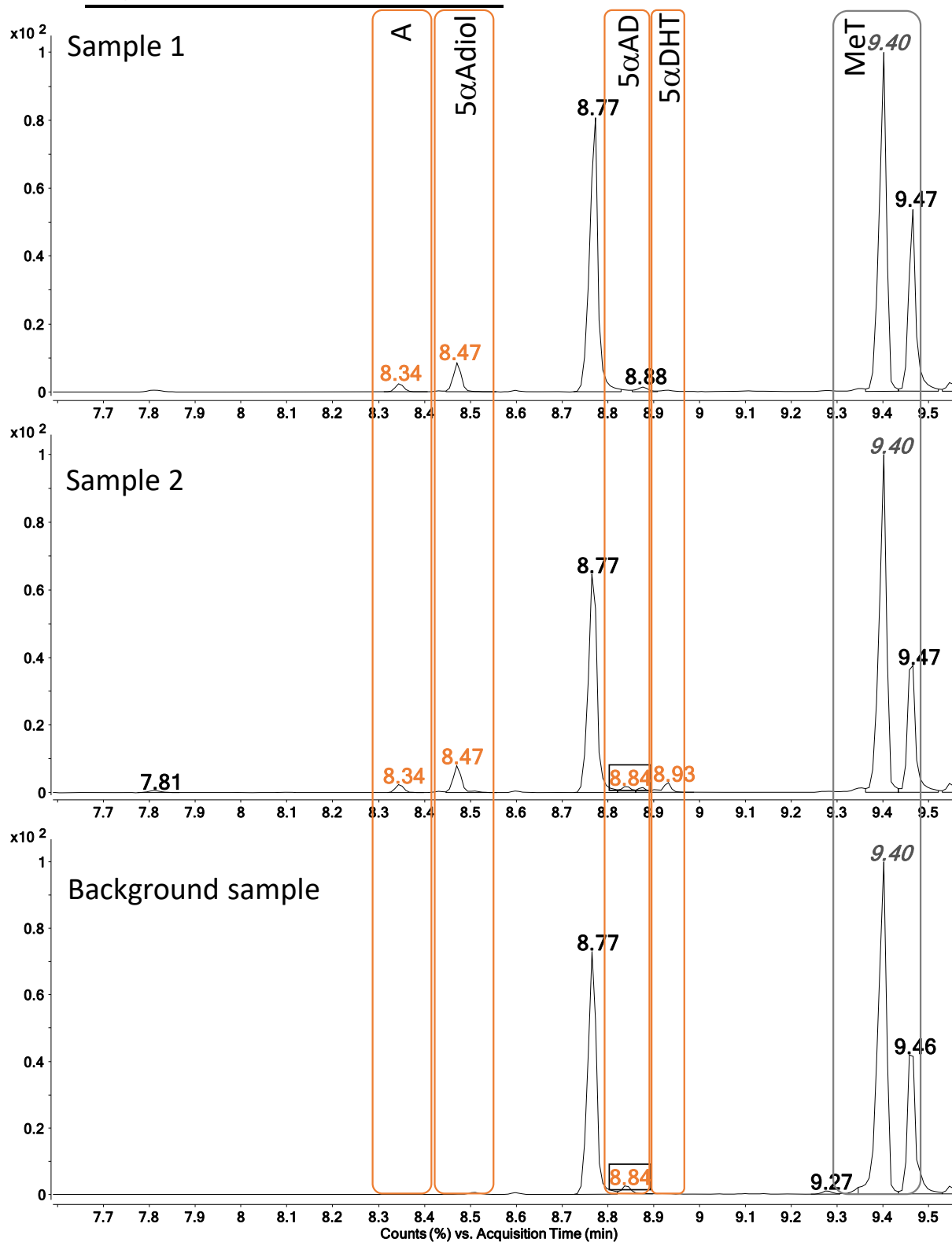
The following document displays chromatograms obtained after incubation of the endogenous anabolic androgenic steroids (EAAS) 5 α -androstanedione, 5 β -androstanedione, androstenedione, androsterone and etiocholanolone with isolated recombinant human aldo-keto reductase (AKR) 1C3.

Similarly to the main document all 5 α -androstanes are highlighted in orange, all 5 β -androstanes are highlighted in green, testosterone and androstenedione are highlighted in violet and the internal standard methyltestosterone (MeT) is highlighted in grey.

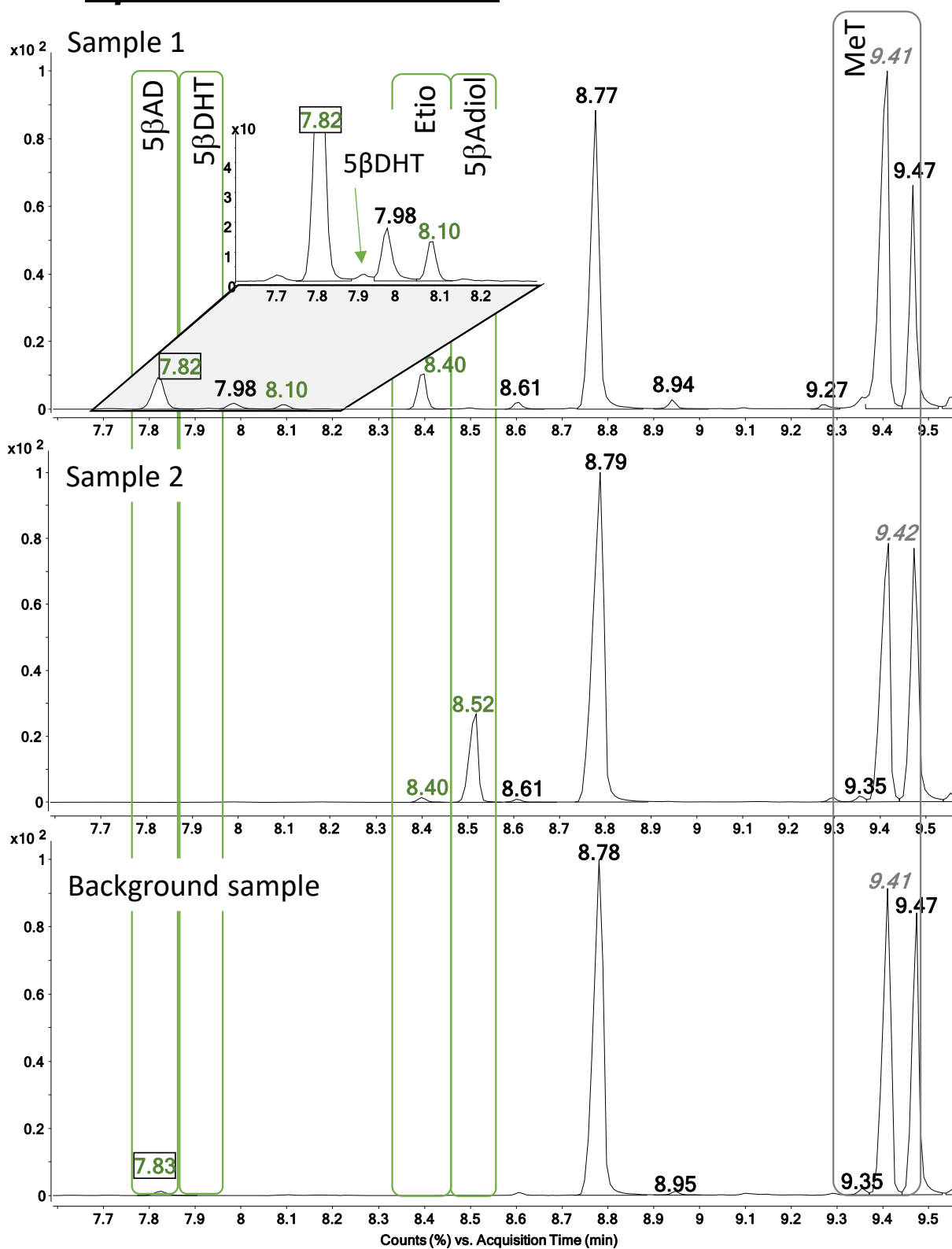
To simplify the graphics, substrates are indicated with framed retention times (RT) and all detected EAAS are labeled with abbreviations: A: androsterone, 5 α Adiol: 5 α -androstanediol, 5 α AD: 5 α -androstanedione, 5 α DHT: 5 α -dihydrotestosterone, Etio: etiocholanolone, 5 β Adiol: 5 β -androstanediol, 5 β AD: 5 β -androstanedione, 5 β DHT: 5 β -dihydrotestosterone, T: testosterone, AED: androstenedione.

Comment: As the peak corresponding to 5 β DHT in sample 1 (incubation of 5 β AD with AKR1C3) is very small, a zoomed segment of the chromatogram is provided.

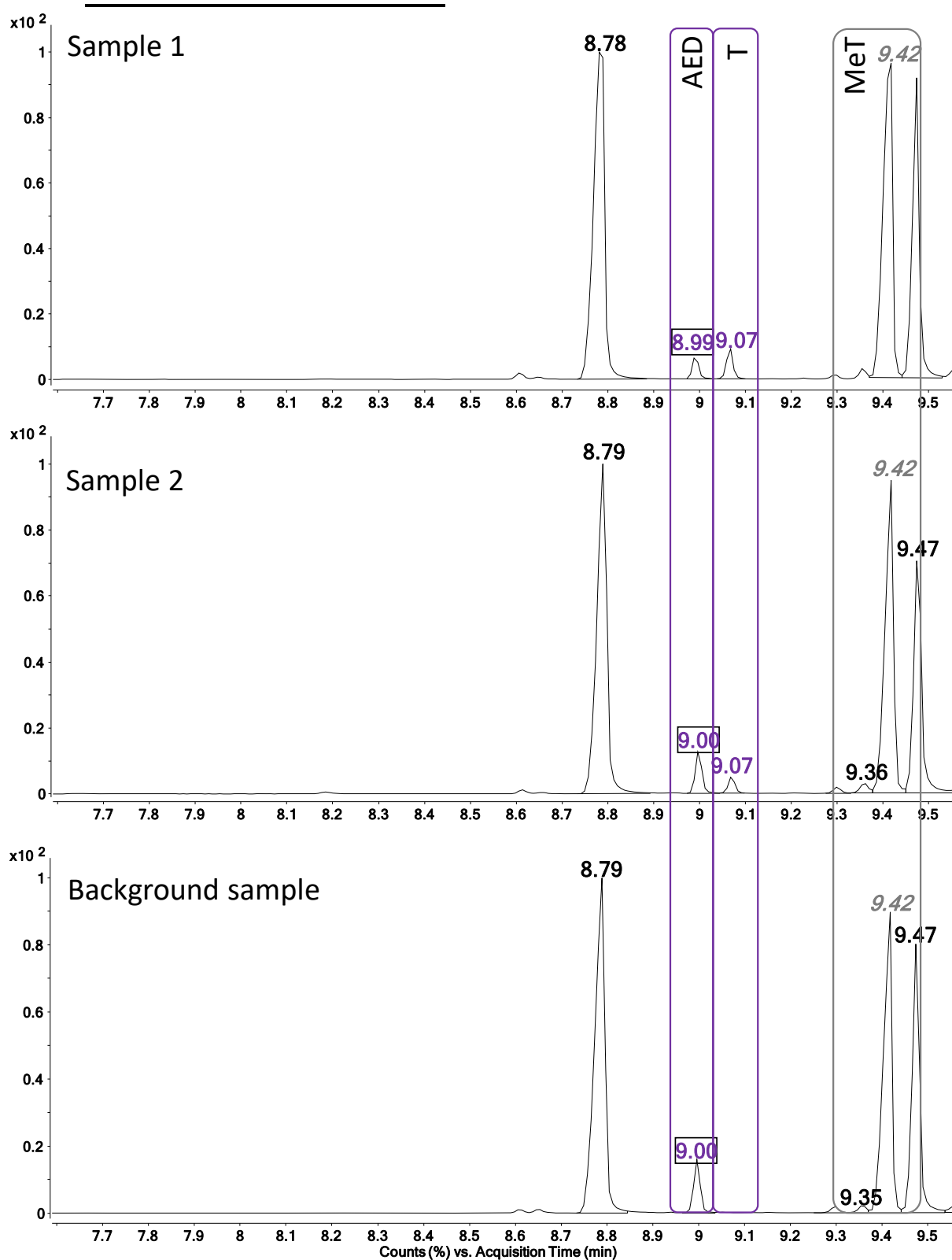
5 α Androstanedione



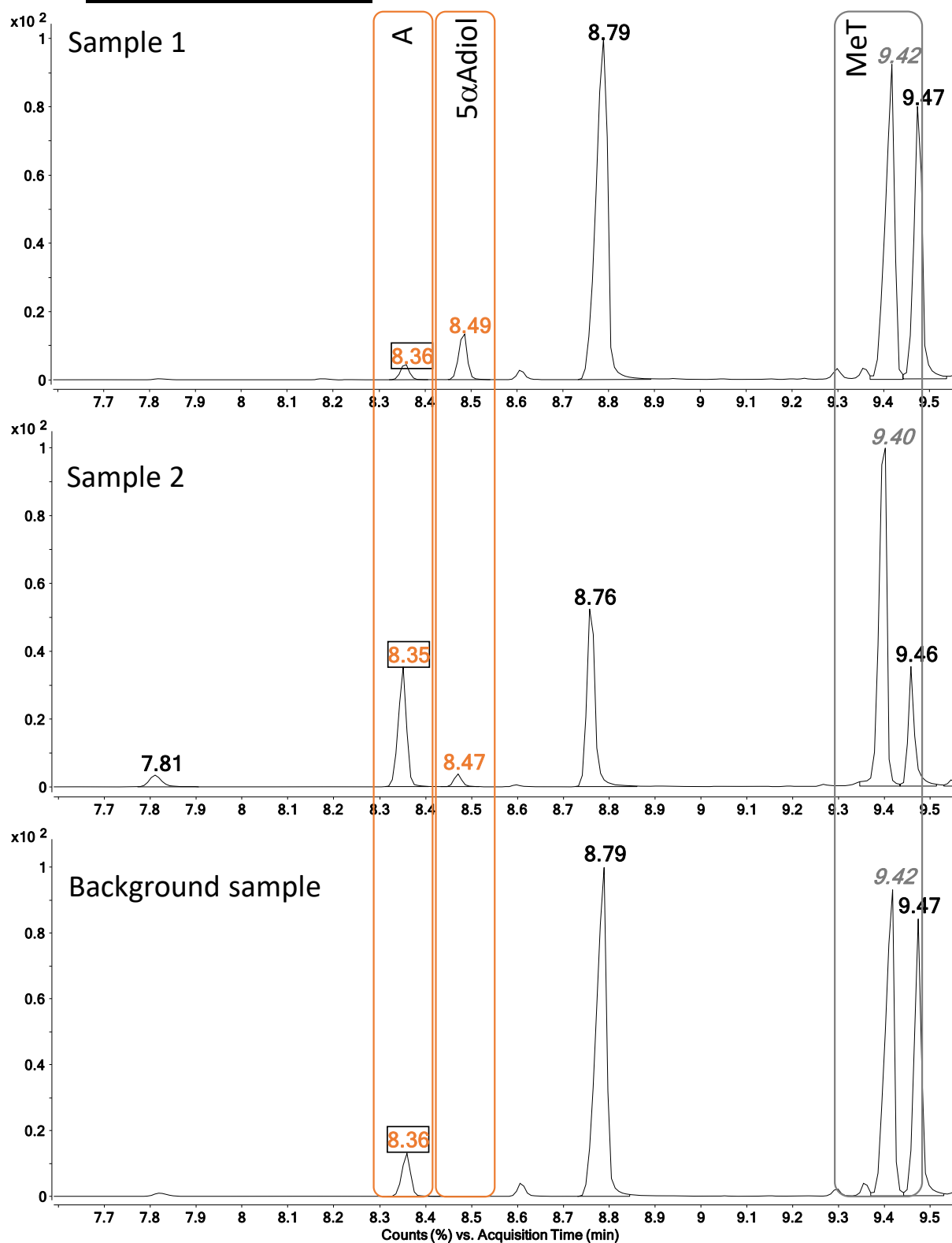
5 β Androstanedione



Androstenedione



Androsterone



Etiocholanolone

