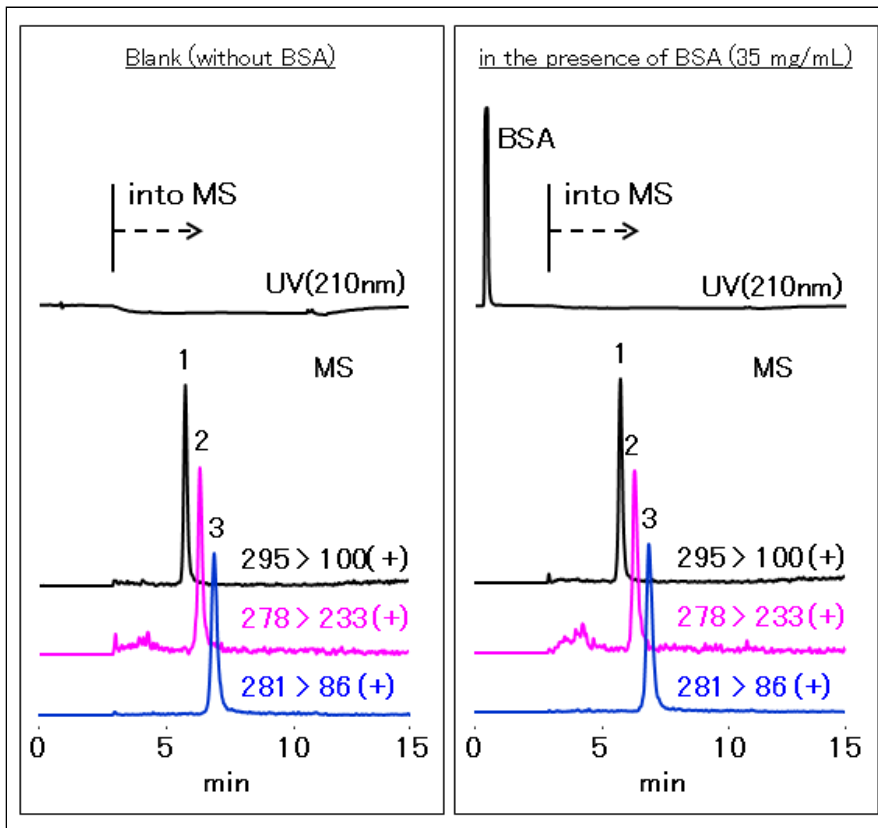


### LC/MS/MS Analysis of Tricyclic Antidepressants in BSA (ODP2 HP)

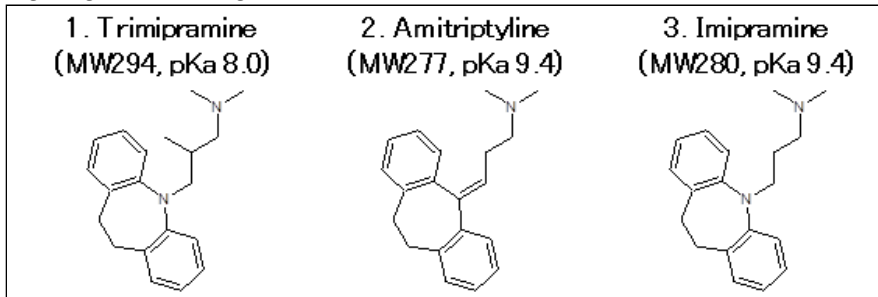
ODP2 HP is a polymer-based reversed phase chromatography with smaller pore size than conventional ODS columns, making it difficult for protein to adsorb ODP2 HP column and elute early and clearly. In this application, tricyclic antidepressants in BSA were analyzed by LC/MS/MS using ODP2 HP without pretreatment. Tricyclic antidepressants are basic drugs retained by the column under alkaline conditions, because the basic compounds are not dissociated and, in consequence, their hydrophobicity decrease. Furthermore, it was confirmed that high recovery of each drug without being influenced by ion suppression of BSA.



Sample : 5 $\mu$ L

(Left) 1ng/mL each (in H<sub>2</sub>O)

(Right) 1ng/mL each (in 35mg/mL BSA solution)



Column : Shodex ODP2 HP-2B (2.0mmI.D. x 50mm)  
 Eluent : (A); 0.05% NH<sub>3</sub> aq. (pH 11.0)  
 (B); CH<sub>3</sub>CN  
 Linear gradient ; (B%) 5%(0min), 5% to 90%(5 to 10min), 5%(10.1 to 15min)  
 Flow rate : 0.2mL/min  
 Detector : UV(210nm), ESI-MS/MS (MRM positive)  
 Column temp. : 30°C