

## Supporting information

### Aromatic sulfonamides including a sulfonic acid tail: new membrane impermeant carbonic anhydrase inhibitors for targeting selectively the cancer-associated isoforms.

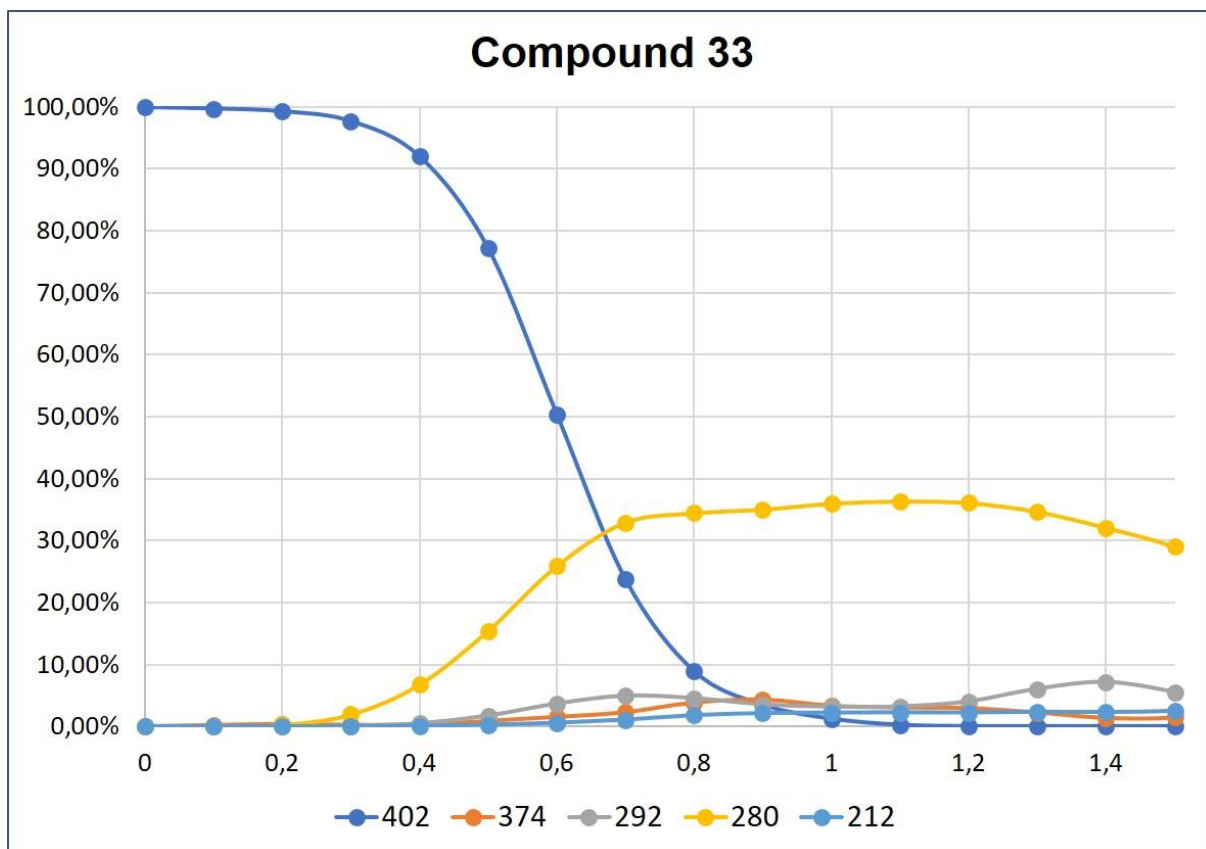
Simone Giovannuzzi <sup>1</sup>, Mario D'Ambrosio <sup>2</sup>, Cristina Luceri <sup>2</sup>, Marco Pallecchi <sup>1</sup>, Gianluca Bartolucci <sup>1</sup>, Alessio Nocentini <sup>1\*</sup> and Claudiu T. Supuran <sup>1</sup>

<sup>1</sup> Department of NEUROFARBA, Section of Pharmaceutical and Nutraceutical Sciences, University of Florence, Polo Scientifico, Via U. Schiff 6, 50019 Sesto Fiorentino, Firenze, Italy.

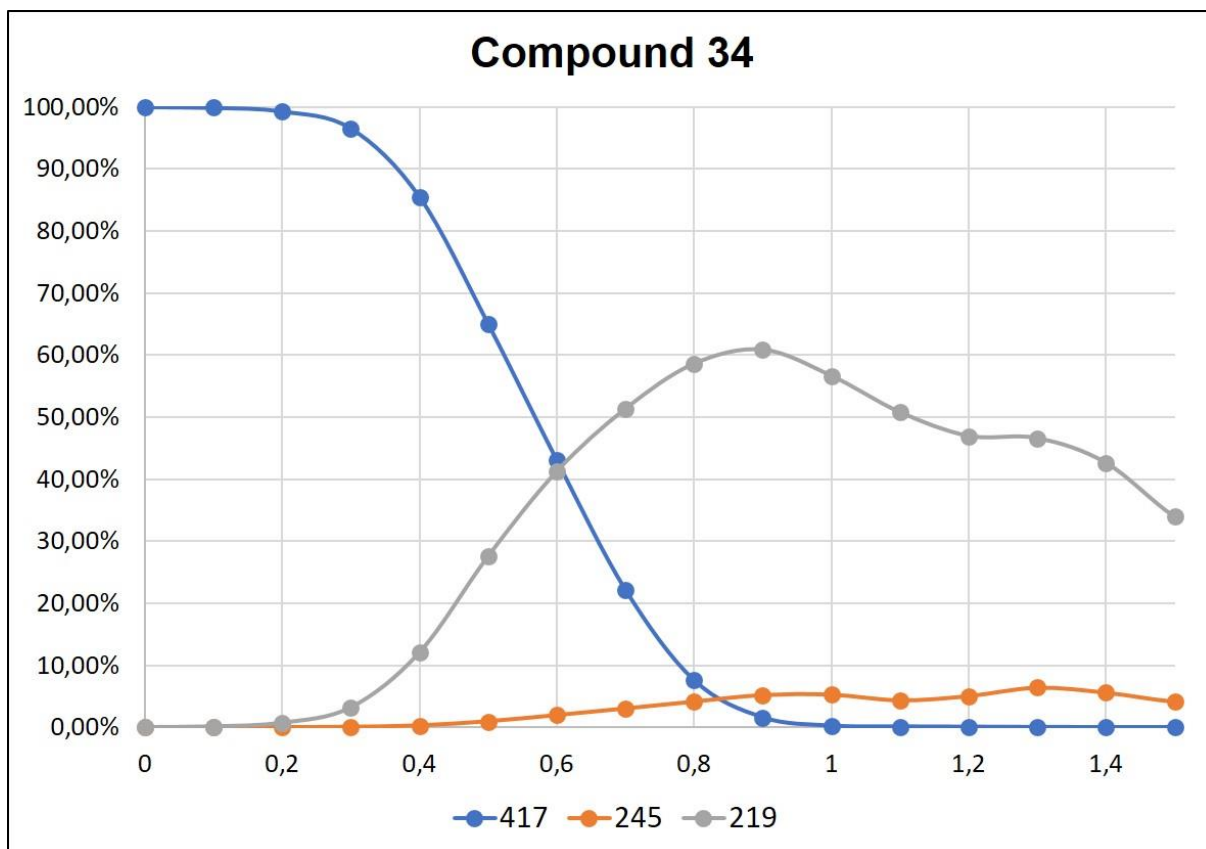
<sup>2</sup> University of Florence, Department of NEUROFARBA, Section of Pharmacology and Toxicology, Viale Gaetano Pieraccini 6, 50100, Florence, Italy.

**Table S1.** MS/MS parameters

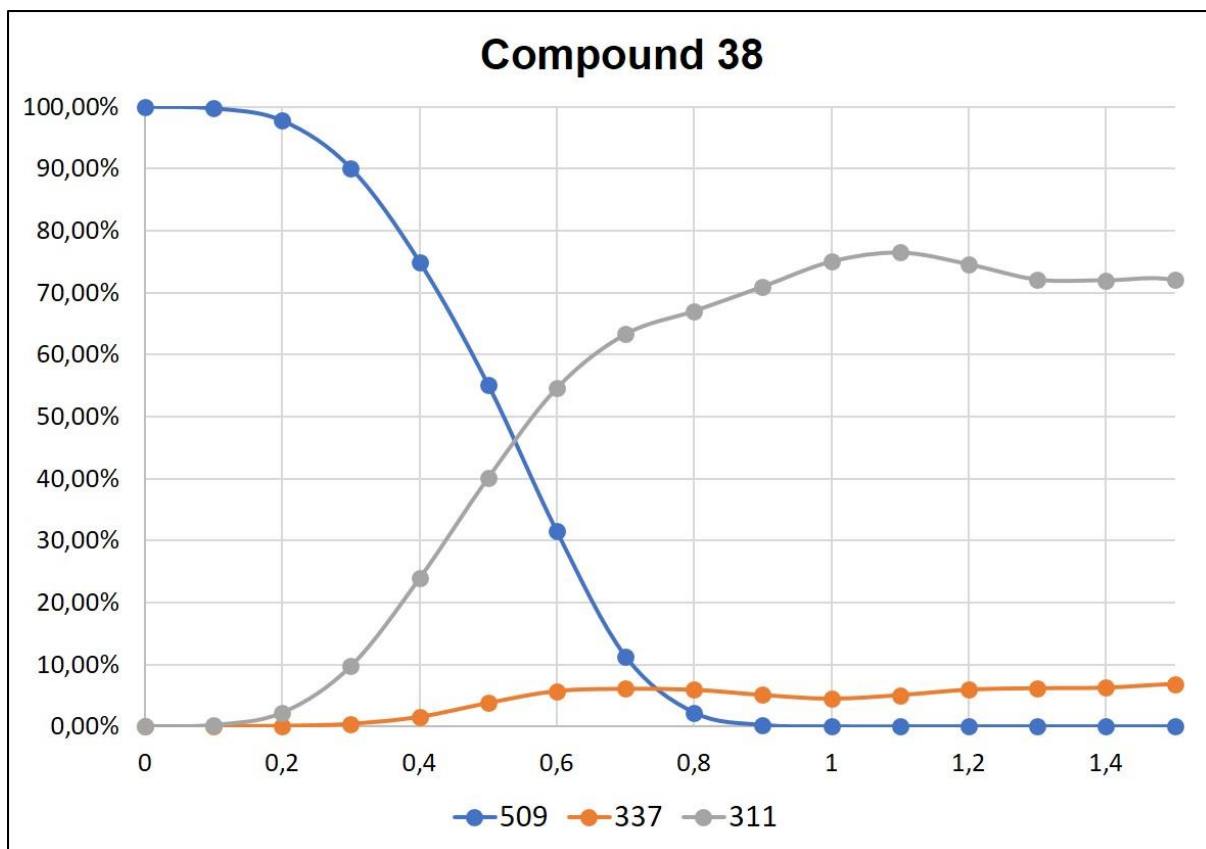
Compound	Precursor ion (m/z)	Quantifier ion (m/z) [EV (V)]
<b>33</b>	402	280 [1,0]
<b>34</b>	417	219 [1,0]
<b>38</b>	509	311 [1,0]
<b>39</b>	432	367 [1,0]
<b>41</b>	359	223 [0,8]
<b>43</b>	388	252 [1,2]



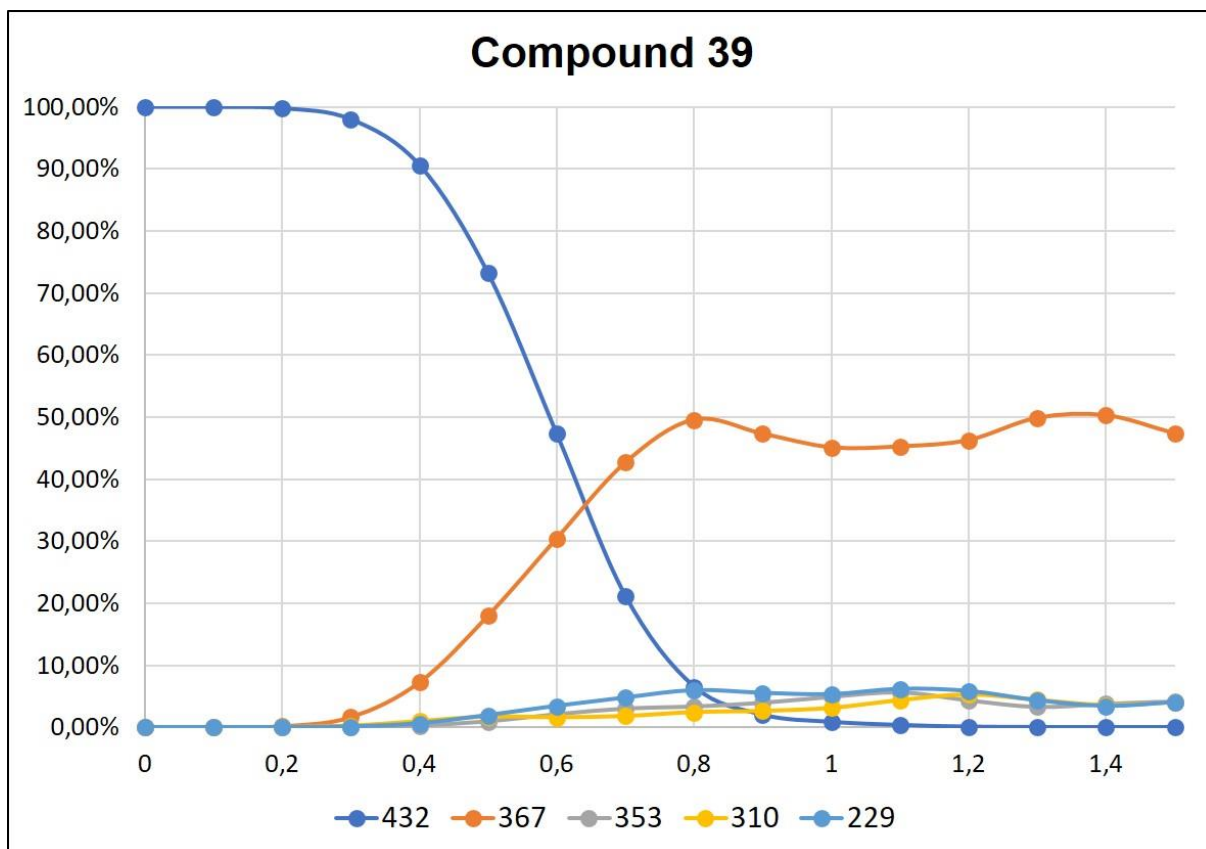
**Figure S1.** Breakdown curves of compound 33.



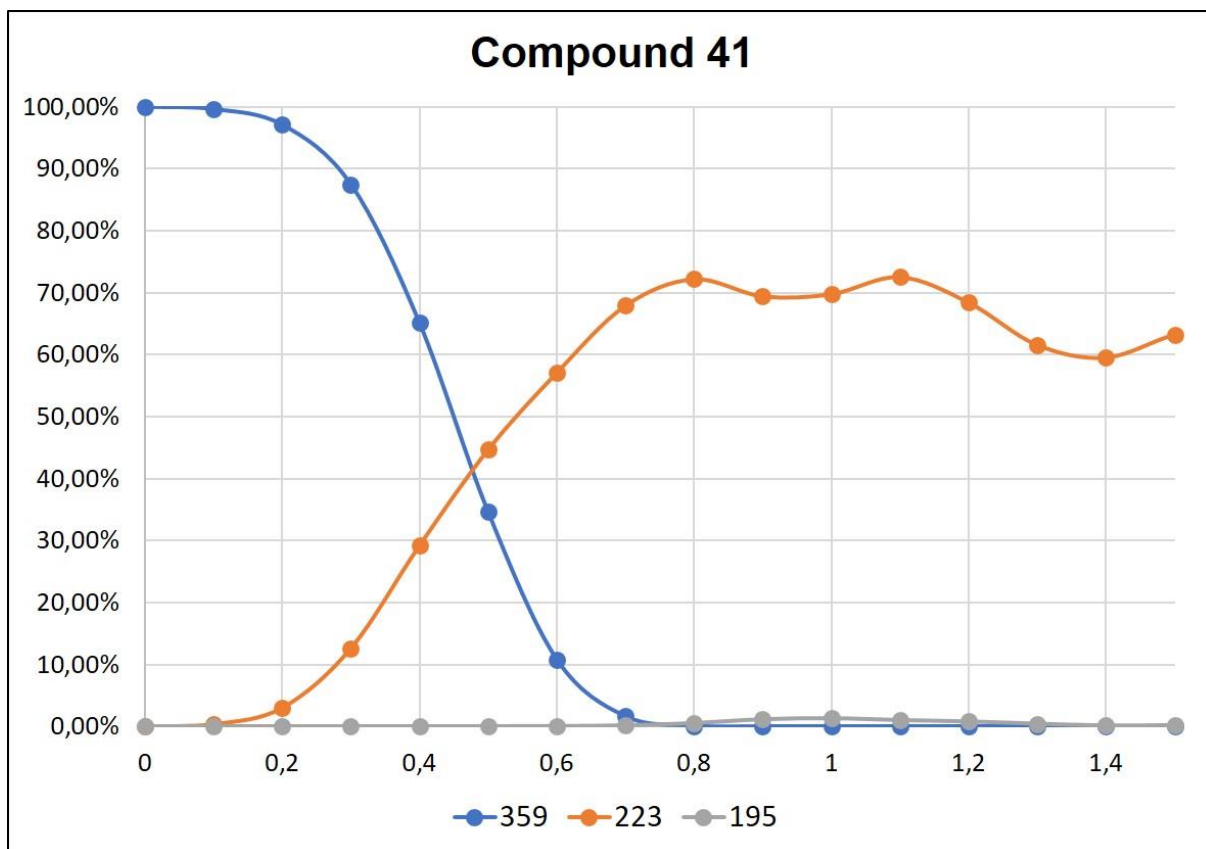
**Figure S2.** Breakdown curves of compound 34.



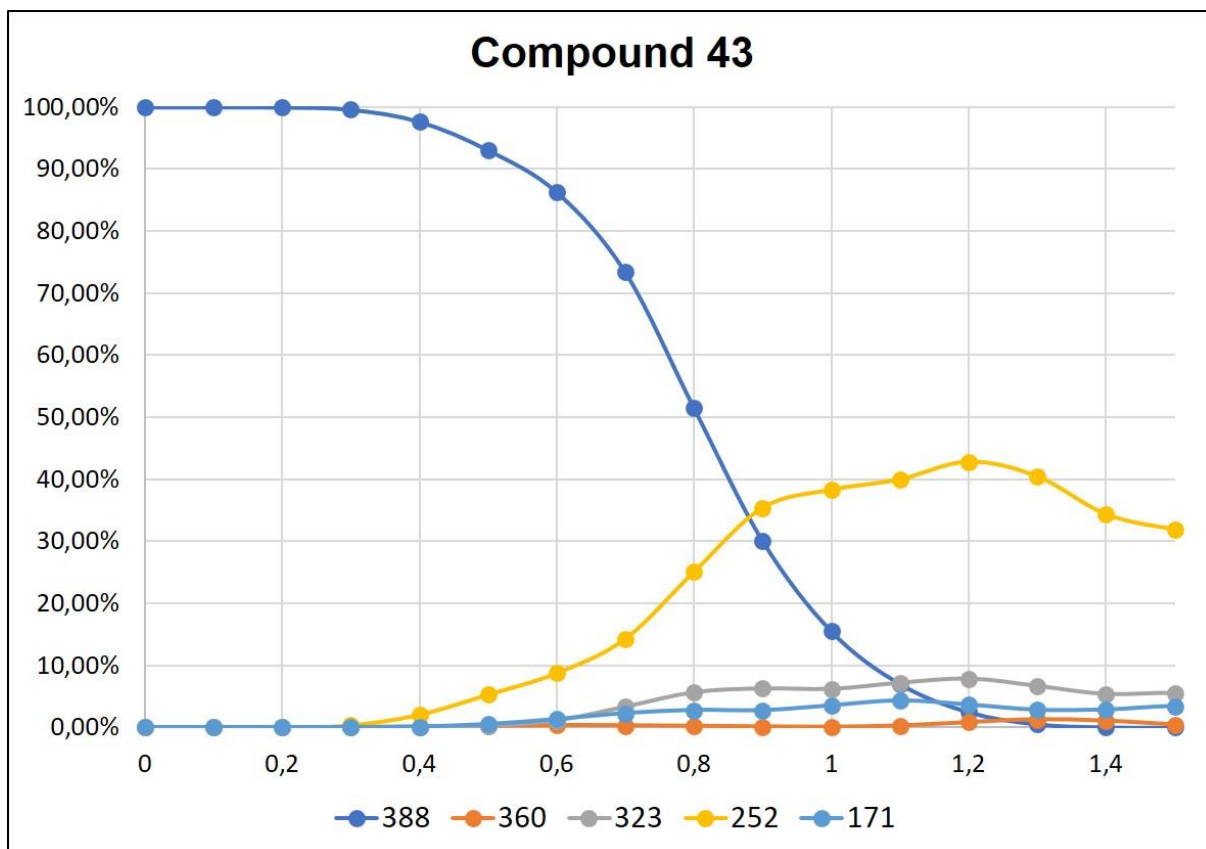
**Figure S3.** Breakdown curves of compound 38.



**Figure S4.** Breakdown curves of compound 39.



**Figure S5.** Breakdown curves of compound 41.



**Figure S6.** Breakdown curves of compound 43.