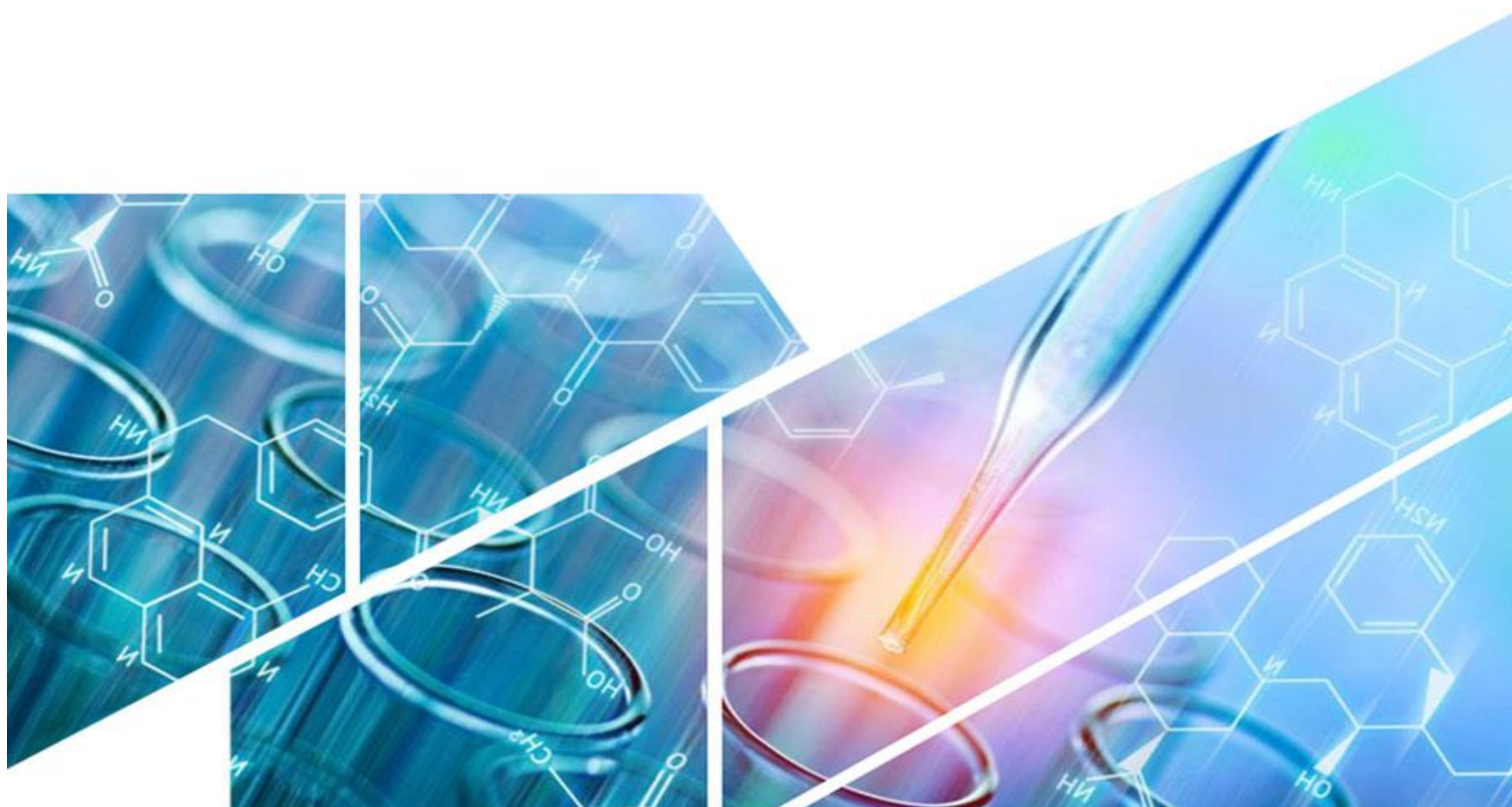
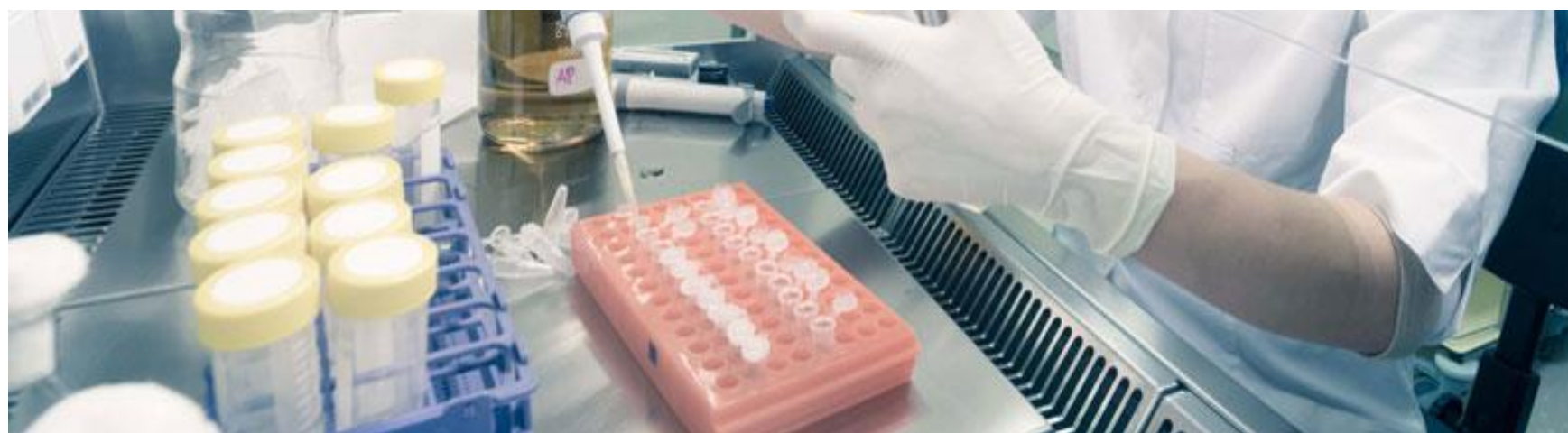


Carbonic Anhydrase Inhibitors (inhibitors, agonists and modulators)



There are three recognised classes of carbonic anhydrase enzymes, alpha, beta and gamma, which have no significant sequence identity, and have structurally distinct overall folds. Yet, despite their structural differences, the active sites of all three classes function with a single zinc atom that is essential for catalysis. These enzymes are of ancient origin, and appear to have evolved independently from one another, thereby providing an excellent example of convergent evolution. The three classes have differing distributions in different organisms: in mammals, all the isozymes so far discovered belong to the alpha-class; plants produce mainly the beta-class; prokaryotes encode all three classes of enzyme, with the beta- and gamma-classes predominating.



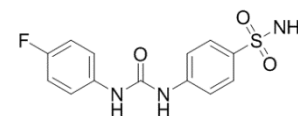
SLC-0111 - CAS 178606-66-1

Catalog Number:

Molecular Weight: 309.31

Molecular Formula: C₁₃H₁₂FN₃O₃S

Description: SLC-0111, also known as U-104, MST-104 and NSC 213841, is a potent carbonic anhydrase (CA) inhibitor (K_i values are 4.5, 45.1, 5080 and 9640 nM for CA XII, CA IX, CA I and CA II respectively in MDA-MB-231 cells).



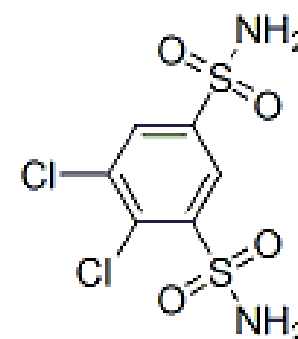
Dichlorphenamide - CAS 120-97-8

Catalog Number: 120-97-8

Molecular Weight: 305.16

Molecular Formula: C₆H₆Cl₂N₂O₄S₂

Description: Dichlorphenamide is a sulfonamide and a carbonic anhydrase inhibitor of the meta-Disulfamoylbenzene class.



Brinzolamide - CAS 138890-62-7

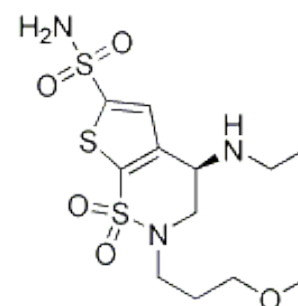
Catalog Number: B0084-058216

Price: \$389/1 g

Molecular Weight: 383.51

Molecular Formula: C₁₂H₂₁N₃O₅S₃

Description: Brinzolamide is a potent carbonic anhydrase II inhibitor with IC₅₀ of 3.19 nM.



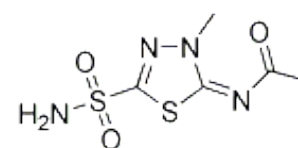
Methazolamide - CAS 554-57-4

Catalog Number: 554-57-4

Molecular Weight: 236.27

Molecular Formula: C₅H₈N₄O₃S₂

Description: Methazolamide is a carbonic anhydrase inhibitor with K_i of 50 nM, 14 nM and 36 nM for hCA I, hCA II and bCA IV isoforms, respectively.



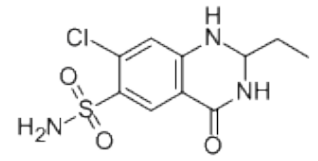
quinethazone - CAS 73-49-4

Catalog Number: 73-49-4

Molecular Weight: 289.74

Molecular Formula: C₁₀H₁₂ClN₃O₃S

Description: Quinethazone is a thiazide-like diuretic. It is a carbonic anhydrase inhibitor and can be used for the treatment of hypertension.



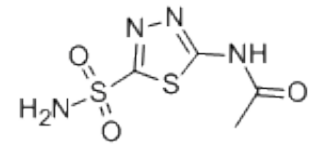
Acetazolamide - CAS 59-66-5

Catalog Number: 59-66-5

Molecular Weight: 222.25

Molecular Formula: C₄H₆N₄O₃S₂

Description: Acetazolamide is a carbonic anhydrase inhibitor used to treat glaucoma.



Tioxolone - CAS 4991-65-5

Catalog Number: 4991-65-5

Molecular Weight: 168.17

Molecular Formula: C₇H₄O₃S

Description: Tioxolone is a metalloenzyme carbonic anhydrase I inhibitor with a K_i of 91 nM.

