

## mGluR5 modulator 1 Biochemical | mGluR5 biochemical

mGluR5 modulator 1

CATALOG #  
AAA227556

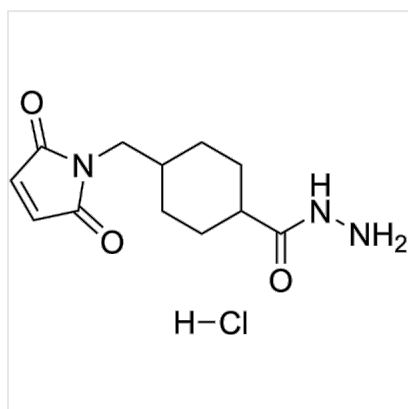
### PRODUCT SYNONYMS

mGluR5 modulator 1; mGluR5 biochemical

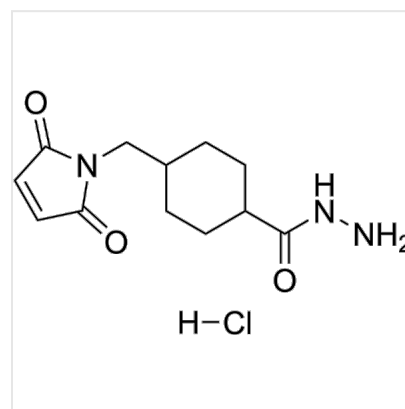
### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity/Purification     | 98%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| CAS                     | 1261171-52-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Solubility              | <1mg/ml refers to the product slightly soluble or insoluble                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| In vitro                | mGluR5 modulator 1 (compound 2c; 0.1-0.00001 nM) potentiates the L-glutamate and DHPG responses to the same maximum response as the orthosteric agonists alone in the Ca <sup>2+</sup> mobilization and IP1 accumulation assays[1]. mGluR5 modulator 1 (0.1-0.00001 nM) potentiates the L-glutamate and DHPG responses above the orthosteric agonist maximal response in the ERK1/2 phosphorylation assay[1]. mGluR5 modulator 1 induces mGlu5 internalization in the absence of add orthosteric agonist or antagonist[1]. mGluR5 modulator 1 potentiates the responses induced by both orthosteric agonists (L-glutamate or DHPG) in Ca <sup>2+</sup> mobilization (pK <sub>B</sub> =5.4 and 5.3, respectively), inositol monophosphate accumulation, and ERK1/2 phosphorylation signaling (pK <sub>B</sub> =5.88 and 5.4, respectively) assays in HEK293A-mGlu 5 -low cells[1]. mGluR5 modulator 1 enhances the effect of DHPG in cortical neurons with pEC <sub>50</sub> values of 6.32 and 6.33 in Ca <sup>2+</sup> mobilization and inositol monophosphate (IP1) accumulation assays[1]. |
| Preparation and Storage | Powder: -20 degree C for 3 years<br>In solvent: -80 degree C for 2 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### IMAGES



Structure  
Mal-C2-cyclohexylcarboxyl-hydrazide hydrochloride, CAS 174422-72-1



Structure  
Mal-C2-cyclohexylcarboxyl-hydrazide hydrochloride, CAS 174422-72-1

### ADDITIONAL INFORMATION

#### Related Product Information for mGluR5 biochemical

mGluR5 modulator 1 is a mGluR5 positive allosteric modulator. mGluR5 modulator 1 can be used for the research of the schizophrenia and cognitive impairments.

## References

1. An S, et al. Small-molecule PROTACs: An emerging and promising approach for the development of targeted therapy drugs. EBioMedicine. 2018 Oct;36:553-562

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/biochemical/mglur5-modulator-1/227556>