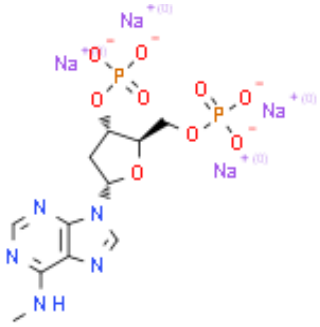
Product Data Sheet

Cas No.:	1454889-37-2	Cat. No:	PC10795
Product Name:	MRS 2179 tetrasodium salt		
Product synonym:	MRS 2179 tetrasodium salt		
Chemical name:	MRS 2179 tetrasodium salt		
MF:	C11H13N5NA4O9P2	FW:	513.155627012253
Purity:	≥98%（HPLC）	Batch No.:	-
Storage:			
Structural formula:			
λmax：	-	Formulation：	-
Solubility :			
SMILES :	[Na+].[Na+].[Na+].[Na+].CNC1N=CN=C2N([C@@H]3C[C@H](OP([O-])(=O)[O-])[C@@H](COP([O-])(=O)[O-])O3)C=NC=12		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

P2Y1受体的竞争性拮抗剂,MRS 2179是一种有效的，选择性的，竞争性的P2Y1受体拮抗剂，Kb为100 nM；在P2Y2，P2Y4或P2Y6受体（>30 uM）上没有显示出明显的活性；抑制ADP诱导的血小板形状变化，聚集和Ca2+升高但没有对ADP诱导的腺苷酸环化酶抑制的影响；降低小鼠的血小板计数。 化学名： 2'-Deoxy-N6-methyladenosine 3',5'-bisphosphate tetrasodium salt 生物活性： MRS 2179 tetrasodium salt is a competitive antagonist at P2Y1 receptors (KB = 100 nM). Selective over P2X1 (IC50 = 1.15 μM), P2X3 (IC50 = 12.9 μM), P2X2, P2X4, P2Y2, P2Y4 and P2Y6 receptors. Inhibits the upregulation of NTPDase1 by ATPγS. 技术参数： 分子量513.16 公式C11H13N5O9P2Na4 储存Store at -20°C 纯度≥98% (HPLC) CAS Number1454889-37-2 Physical Appearance: White solid Solubility: water to 50 mM <table id="ds_solubility_tbl" class="table table-bordered" style="border-spacing: 0px; border-collapse: collapse; width: 782px; max-width: 100%; margin-bottom: 0px; border: 1px solid #dddddd; color: #333333; font-family: arial, sans-serif; font-size: 14px; text-indent: 0px; height: 45px;"> <tbody style="box-sizing: border-box;"> <tr style="box-sizing: border-box;"><th style="box-sizing: border-box; padding: 8px; text-align: left; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">溶剂</th><th style="box-sizing: border-box; padding: 8px; text-align: left; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">最高浓度 mg/mL</th><th style="box-sizing: border-box; padding: 8px; text-align: left; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">最高浓度 mM</th></tr> <tr style="box-sizing: border-box;"><th class="solubility_text" style="box-sizing: border-box; padding: 8px; text-align: left; vertical-align: top; line-height: 1.42857; border: 1px solid #dddddd;" rowspan="2">溶解性</th></tr> <tr style="box-sizing: border-box;"> <td style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">water</td> <td style="box-sizing:

border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">25.66</td> <td style="box-sizing:
border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">50</td> </tr> </tbody>
</table> <h2 style="box-sizing: border-box; font-family: arial, sans-serif; line-height: 1; color: #005f9e; margin-top: 0px; margin-bottom: 10px;
font-size: 22px;"> </h2> <h2 style="box-sizing: border-
box; font-family: arial, sans-serif; line-height: 1; color: #005f9e; margin-top: 0px; margin-bottom: 10px; font-size: 22px;"><span style="color:
#000000; font-size: medium;">制备储备液 for MRS 2179 tetrasodium salt</h2> <p style="box-sizing: border-box;
margin: 0px 0px 10px; font-size: 14px; color: #333333; font-family: arial, sans-serif;">以下数据基于<span id="ss_type"
style="box-sizing: border-box;">产品分子量 <span id="ss_mwt" style="box-sizing: border-
box;">513.16。 Batch specific molecular weights may vary from batch to batch due to the degree of hydration, which will affect the
solvent volumes required to prepare stock solutions. <form class="form-inline" style="box-sizing: border-box; color: #333333; font-family:
arial, sans-serif; font-size: 14px;"> <div class="form-group" style="box-sizing: border-box; margin-bottom: 0px; display: inline-
block; position: relative; height: auto; overflow: visible; vertical-align: middle;">选择批次从而根据批次分子量重新计算: <div
class="select_wrapper" style="box-sizing: border-box; display: inline-block !important; position: relative; max-width: 100%; width: auto; min-
width: 50px; height: 30px !important; background: #eeeeee; border-color: #a9a9a9; vertical-align: middle !important; margin: 0px 10px;"><select
id="ss_select" class="form-control input-sm" style="margin: 0px; font-style: inherit; font-variant: inherit; font-weight: inherit;
font-stretch: inherit; font-size: 14px; line-height: 16px; font-family: inherit; color: #555555; max-width: 100%; width: 110px; background-image: initial;
background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip:
initial; border-color: #a9a9a9; border-radius: 4px; box-shadow: rgba(0, 0, 0, 0.075) 0px 1px 1px inset; transition: border-color 0.15s ease-in-out 0s, box-shadow
0.15s ease-in-out 0s; min-width: 50px; appearance: none; text-indent: 1px; position: initial; z-index: 2; height: 30px !important; padding: 5px 25px 5px 5px
!important; vertical-align: middle !important;" name="batch">
        <option style="box-sizing: border-box; background: #eeeeee;"
value="513.16" data-filtered="filtered"></option>

        <option style="box-sizing: border-box; background: #eeeeee;"
value="493.35" data-filtered="filtered">3</option>

           <option style="box-sizing: border-box; background:
#eeeeee;" value="493.35" data-filtered="filtered">4</option>

           <option style="box-sizing: border-box; background:
#eeeeee;" value="585.22" data-filtered="filtered">5</option>

           <option style="box-sizing: border-box; background:
#eeeeee;" value="639.27" data-filtered="filtered">6</option>

           <option style="box-sizing: border-box; background:
#eeeeee;" value="513.16" data-filtered="filtered">7</option>

           <option style="box-sizing: border-box; background:
#eeeeee;" value="576.21" data-filtered="filtered">8</option>

           <option style="box-sizing: border-box; background:
#eeeeee;" value="576.21" data-filtered="filtered">9</option>

       </select></div> <button id="recalc_stock_soln_data"
class="btn btn-quinary" style="margin: 0px; font-style: inherit; font-variant: inherit; font-stretch: inherit; font-size: 13px; line-height: 15px;
font-family: inherit; color: #0084a9; overflow: visible; appearance: button; cursor: pointer; vertical-align: middle; touch-action: manipulation; user-select: none;
background-image: none; border-width: 1px; border-style: solid; border-color: #0084a9; background-color: #ffffff; transition: all 0.3s ease-out 0s; font-weight:
700 !important; padding: 6px 7px !important; border-radius: 4px !important; height: 30px !important;">重新计算</button></div>
</form> <table class="table table-bordered" style="border-spacing: 0px; border-collapse: collapse; width: 847px; max-width: 100%;
margin-bottom: 20px; border: 1px solid #dddddd; margin-top: 15px; color: #333333; font-family: arial, sans-serif; font-size: 14px; text-indent: 0px;">
<tbody style="box-sizing: border-box;"> <tr style="box-sizing: border-box;"><th style="box-sizing: border-box;
padding: 8px; text-align: left; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">浓度/溶剂体积/质量</th><th

style="box-sizing: border-box; padding: 8px; text-align: left; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">1 mg</th><th style="box-sizing: border-box; padding: 8px; text-align: left; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">5 mg</th><th style="box-sizing: border-box; padding: 8px; text-align: left; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">10 mg</th></tr> <tr style="box-sizing: border-box;"> <td style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">0.5 mM</td> <td id="ss_0_5_1" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">3.9 mL</td> <td id="ss_0_5_5" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">19.49 mL</td> <td id="ss_0_5_10" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">38.97 mL</td> </tr> <tr style="box-sizing: border-box;"> <td style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">2.5 mM</td> <td id="ss_2_5_1" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">0.78 mL</td> <td id="ss_2_5_5" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">3.9 mL</td> <td id="ss_2_5_10" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">7.79 mL</td> </tr> <tr style="box-sizing: border-box;"> <td style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">5 mM</td> <td id="ss_5_1" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">0.39 mL</td> <td id="ss_5_5" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">1.95 mL</td> <td id="ss_5_10" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">3.9 mL</td> </tr> <tr style="box-sizing: border-box;"> <td style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">25 mM</td> <td id="ss_25_1" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">0.08 mL</td> <td id="ss_25_5" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">0.39 mL</td> <td id="ss_25_10" style="box-sizing: border-box; padding: 8px; line-height: 1.42857; vertical-align: top; border: 1px solid #dddddd;">0.78 mL

</td> </tr> </tbody> </table> 参考文献 <p style="box-sizing: border-box; margin: 0px 0px 10px; font-size: 14px; color: #333333; font-family: arial, sans-serif;"><em style="box-sizing: border-box;">参考文献是支持产品生物活性的出版物。 <p style="box-sizing: border-box; margin: 0px 0px 10px; font-size: 14px; color: #333333; font-family: arial, sans-serif;">Boyer <em style="box-sizing: border-box;">et al (1998) Competitive and selective antagonism of P2Y1 receptors by <em style="box-sizing: border-box;">N6-methyl 2'-deoxyadenosine 3',5'-bisphosphate. Br.J.Pharmacol. <em style="box-sizing: border-box;">124 1 PMID: 9630335 <p style="box-sizing: border-box; margin: 0px 0px 10px; font-size: 14px; color: #333333; font-family: arial, sans-serif;">Lu <em style="box-sizing: border-box;">et al (2007) Stimulation of the P2Y1 receptor up-regulates nucleoside-triphosphate diphosphohydrolase-1 in human retinal pigment epithelial cells. J.Pharmacol.Exp.Ther. <em style="box-sizing: border-box;">323 157 PMID: 17626796 <p style="box-sizing: border-box; margin: 0px 0px 10px; font-size: 14px; color: #333333; font-family: arial, sans-serif;">Nandanan <em style="box-sizing: border-box;">et al (2000) Synthesis, biological activity, and molecular modeling of ribose-modified deoxyadenosine bisphosphate analogues as P2Y1 receptor ligands. J.Med.Chem. <em style="box-sizing: border-box;">43 829 PMID: 10715151 <p style="box-sizing: border-box; margin: 0px 0px 10px; font-size: 14px; color: #333333; font-family: arial, sans-serif;"><span class="highlight" style="box-sizing: border-box;

font-weight: bold;">Brown <em style="box-sizing: border-box;">et al (2000) Activity of novel adenine nucleotide derivatives as agonists and antagonists at recombinant rat P2X receptors. Drug Dev.Res. <em style="box-sizing: border-box;">49 253 PMID: 22791931 <p style="box-sizing: border-box; margin: 0px 0px 10px; font-size: 14px; color: #333333; font-family: arial, sans-serif;">Nandanan <em style="box-sizing: border-box;">et al (1999) Structure-activity relationships of bisphosphate nucleotide derivatives as P2Y1 receptor antagonists and partial agonists. J.Med.Chem. <em style="box-sizing: border-box;">42 1625 PMID: 10229631