

# **CD73**

ecto-5'-nucleotidase, NT5E

CD73 (Ecto-5'-nucleotidase) is a 70-kD glycosylphosphatidyl inositol (GPI)-anchored cell surface protein encoded by the NT5E gene that plays a crucial role in switching on adenosinergic signaling. CD73 is an ectonucleotidase which catalyzes the terminal step in extracellular adenine nucleotide breakdown: the conversion of AMP to adenosine. Adenosine, which binds to a discrete family of cell surface receptors to initiate intracellular signaling cascades, has been shown to be anti-inflammatory and vasorelaxant.

CD73 has both enzymatic and non-enzymatic functions in cells: as a nucleotidase, CD73 catalyzes the hydrolysis of AMP into adenosine and phosphate, and CD73-generated adenosine plays an important role in tumor immunoescape; moreover, CD73 also functions as a signal and adhesive molecule that can regulate cell interaction with extracellular matrix components, such as laminin and fibronectin, to mediate the invasive and metastatic properties of cancers. Both the enzymatic and non-enzymatic functions of CD73 are involved in cancer-associated processes and are not completely independent of each other. There is ample evidence to show that CD73 is a key regulatory molecule in cancer development and is overexpressed in many cancers, including leukemia, glioblastoma, melanoma, ovarian cancer, esophageal cancer, prostate cancer and breast cancer.

# **CD73 Inhibitors**

#### AB-680

Cat. No.: HY-125286

AB-680 is a highly potent, reversible and selective inhibitor of CD73 (an

ecto-nucleotidase), with a  $\rm K_i$  of 4.9 pM for hCD73, displays >10,000-fold selectivity over related ecto-nucleotidases CD39. Anti-tumor activity.

Purity: 99.71% Clinical Data: Phase 2

Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

# AB-680 ammonium

AB-680 ammonium is a highly potent, reversible and selective inhibitor of CD73 (an

displays >10,000-fold selectivity over related ecto-nucleotidases CD39. Anti-tumor activity.



Cat. No.: HY-125286A

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# CD73-IN-1

Cat. No.: HY-103695

CD73-IN-1 is an inhibitor of CD73 which can be used in the treatment of cancer extracted from patent WO 2017153952 A1, example 80.

Purity: 98.54%

Clinical Data: No Development Reported

Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

#### CD73-IN-2

Cat. No.: HY-131435

CD73-IN-2 is a potent CD73 inhibitor extracted from WO2020151707A1, example 1, has an  $\rm IC_{50}$  of

0.09 nN

HO ROH HO OH

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

#### CD73-IN-3

Cat. No.: HY-137246

CD73-IN-3 is a potent CD73 inhibitor ( $\rm IC_{50}$ =7.3 nM in Calu6 human cell assay). CD73-IN-3, example 2 extracted from patent WO2019168744 A1, has the potential for cancer research.

**Purity:** 99.89%

Clinical Data: No Development Reported

Size:  $10 \text{ mM} \times 1 \text{ mL}$ , 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

#### CD73-IN-4

Cat. No.: HY-131967

CD73-IN-4 is a potent and selective methylenephosphonic acid CD73 inhibitor, with an  $\rm IC_{50}$  of 2.6 nM for human CD73. CD73-IN-4 is potential for the research of cancer immunology.



**Purity:** 99.54%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

# CD73-IN-5

Cat. No.: HY-145334

CD73-IN-5 is a potent and selective non-nucleotide small molecule inhibitor of CD73 (IC $_{\rm 50}$  = 19 nM).

**Purity:** >98%

Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

# CD73-IN-6

Cat. No.: HY-144209

CD73-IN-6 is a **CD73** inhibitor extracted from patent WO2022007677A1 compound 2. CD73-IN-6 can be used for the research of cancer.

**Purity:** >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

#### MethADP

(Adenosine 5'-(α,β-methylene)diphosphate) Cat. No.: HY-112502

MethADP is a specific CD73 inhibitor.

**Purity:** > 98%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

#### MethADP sodium salt

Cat. No.: HY-112502B

MethADP (sodium salt) is a specific CD73 inhibitor.

H<sub>2</sub>N N HO OH OH OH

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

#### MRS4620

MRS4620 is a potent CD73 inhibitor, with a K<sub>i</sub> of 0.436 nM. MRS4620 can be use for the research of cancer immunotherapy.

Cat. No.: HY-144072

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

#### Oleclumab (MEDI9447)

Oleclumab (MEDI9447) is a human IgG1λ anti-CD73

monoclonal antibody that inhibits CD73 function. Oleclumab has an anti-tumor activity.

# Oleclumab

Cat. No.: HY-P99039

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

#### OP-5244

Cat. No.: HY-136978

OP-5244 is a potent and orally active inhibitor of CD73, with an IC<sub>50</sub> of 0.25 nM. OP-5244 reverses immunosuppression through blocking of adenosine production, and has the potential for the cancer research.

Purity: 99 63%

Clinical Data: No Development Reported 5 mg, 10 mg, 25 mg

#### OP-5244 sodium

Cat. No.: HY-136978A

OP-5244 sodium is a potent and orally active inhibitor of CD73, with an IC<sub>50</sub> of 0.25 nM. OP-5244 sodium reverses immunosuppression through blocking of adenosine production, and has the

potential for the cancer research. >98%

Purity:

Clinical Data: No Development Reported 5 mg, 10 mg, 25 mg

# PSB-12379

Cat. No.: HY-100747

PSB-12379, a nucleotide analogue, is a potent Ecto-5'-Nucleotidase (CD73) inhibitor with Kis of 9.03 nM (rat) and 2.21 nM (human).

Purity: 99.54%

Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg

#### PSB-12379 disodium

Cat. No.: HY-100747A

PSB-12379 disodium, a nucleotide analogue, is a potent Ecto-5'-Nucleotidase (CD73) inhibitor with K<sub>i</sub>s of 9.03 nM (rat) and 2.21 nM (human).



Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg

# ZM514

Cat. No.: HY-146759

ZM514 is a potent CD73 inhibitor with  $IC_{50}$ s of 1.39 μM and 14.65 μM for hCD73 and mCD73, respectively. ZM514 has low cytotoxicity. ZM514 can be used for researching anticancer.

Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg