

# EBI2/GPR183

The Epstein-Barr virus (EBV) induced receptor 2 (EBI2; also known as GPR183) is an orphan member of the 7TM receptor family A. EBI2 is a constitutively active seven-transmembrane receptor. EBI2 has been placed in varying 7TM receptor subgroups by different phylogenetic analyses as being a target of peptide or lipid ligands. EBI2 constitutively activates extracellular signal-regulated kinase (ERK) in a pertussis toxin-insensitive manner. EBI2 is up-regulated up to 200-fold in B cells following EBV infection.

EBI2 activation stimulates immune cell migration and has been genetically linked to autoimmune diseases including type 1 diabetes. Small molecule modulators of EBI2 can be useful for probing the function of the receptor and its relevance to human diseases.

## EBI2/GPR183 Inhibitors, Agonists & Antagonists

### 7α,25-Dihydroxycholesterol

(7α,25-OHC) Cat. No.: HY-113962

 $7\alpha$ , 25-dihydroxycholesterol ( $7\alpha$ ,25-OHC) is a potent and selective agonist and endogenous ligand of the orphan GPCR receptor EBI2 (GPR183).  $7\alpha$ , 25-dihydroxycholesterol is highly potent at activating EBI2 ( $EC_{50}$ =140 pM;  $K_d$ =450 pM).

Purity: ≥98.0%

Clinical Data: No Development Reported 1 mg, 5 mg, 10 mg Size:

#### GSK682753A

GSK682753A is a selective and highly potent inverse agonist of the epstein-barr virus-induced receptor 2 (EBI2) with an  $IC_{50}$  of 53.6 nM.

Cat. No.: HY-101192

Purity: 99.84%

Clinical Data: No Development Reported

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

#### ML401

Cat. No.: HY-116814

ML401, a potent chemical probe, selectively antagonizes EBI2 (also known as GPR183) with an IC<sub>50</sub> of 1.03 nM. ML401 displays activity in a chemotaxis assay (IC<sub>s0</sub>=6.24 nM). ML401 shows good stability and no toxicity.

Purity: 99.87%

Clinical Data:

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

#### **NIBR189**

NIBR189 is a small molecule antagonist of the

Epstein-Barr virus-induced gene 2 (EBI2; GPR183) receptor with IC50 of 16 nM(Binding) and 11 nM

(Functional).

Cat. No.: HY-12336

Purity: ≥99.0%

Clinical Data: No Development Reported

10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg