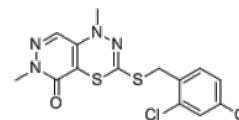


**Product Name** : BTB09089  
**Cat. No.** : PC-49199  
**CAS No.** : 245728-44-3  
**Molecular Formula** : C<sub>14</sub>H<sub>12</sub>Cl<sub>2</sub>N<sub>4</sub>OS<sub>2</sub>  
**Molecular Weight** : 387.297  
**Target** : Proton-sensing GPCRs  
**Solubility** : 10 mM in DMSO



## Biological Activity

BTB09089 (BTB 09089) is a specific small molecule agonist of T cell death-associated gene 8 (TDAG8, **GPR65**). BTB09089 does not act on other proton sensing G-protein-coupled receptors such as G-protein-coupled receptor 4 (GPR4) nor ovarian cancer G-protein-coupled receptor 1 (OGR1). BTB09089 increased cAMP level in the splenocytes from wild-type littermates but not from TDAG8-deficient mice. BTB09089 suppressed the production of IL-2 stimulated with anti-CD3 and anti-CD28 antibodies in splenocytes. BTB09089 suppressed the production of TNF- $\alpha$  and IL-6 while it increased that of IL-10 when stimulated with lipopolysaccharide, in peritoneal exuded macrophages induced by thioglycollate. BTB09089 attenuated immune-mediated inflammation by regulating the cytokine production of T cells and macrophages.

## References

- Onozawa Y, et al. *Eur J Pharmacol.* 2012 May 15;683(1-3):325-31.  
Ma XD, et al. *Exp Neurol.* 2017 Jul;293:115-123.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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