



Clinical Need

There is no licensed therapy to halt or reverse new-onset Type 1 Diabetes

- ✓ Rabbit anti-thymocyte globulin (rATG) slows the progression of T1D (preserves C-peptide and improves glycemic control).
- ✓ rATG it is limited by serum sickness and the formation of neutralizing antibodies.



Multi-specific Antibody

SAB-142 is a Fully Human, Multi-Specific, Targeted Anti-Thymocyte Globulin (hATG) for Delaying Onset and Progression of T1D

- ✓ SAB-142 is generated from a unique multi-specific antibody platform.
- ✓ No Serum Sickness.
- ✓ No anti-drug antibodies with potential for re-dosing.



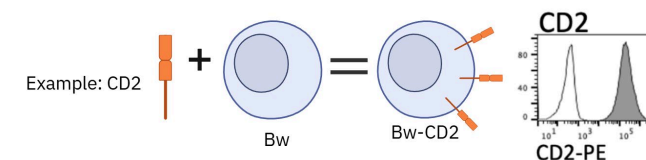
Aim of Study

The aim of this study was to compare the binding profile of rATG and SAB-142 to T cell surface proteins

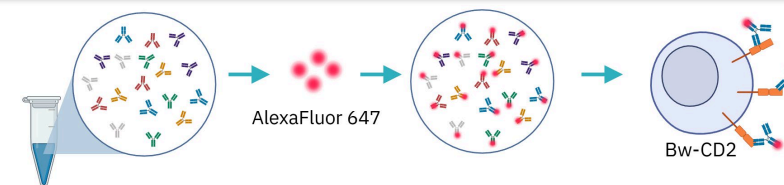
- ✓ Preliminary *in vitro* data suggested that SAB-142 and rabbit ATG both bind to T cells.
- ✓ This work examined the binding of SAB-142 and rATG to specific T cell surface proteins.

Experimental Design

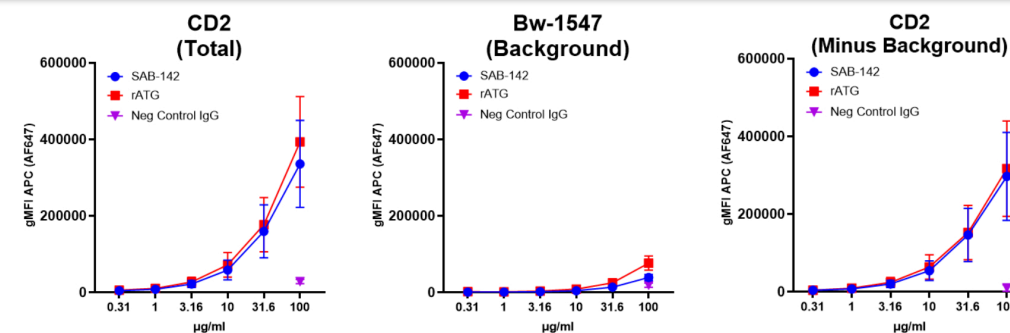
1) Express cell surface proteins, such as CD2 on a mouse T Cell line (Bw) and confirm expression by flow cytometry



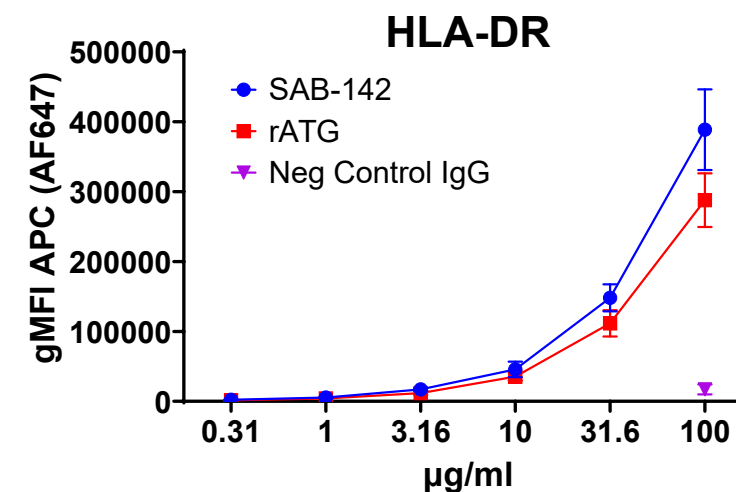
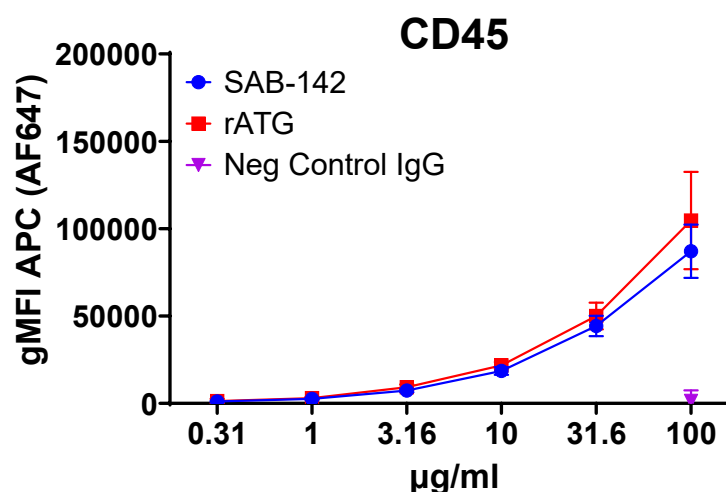
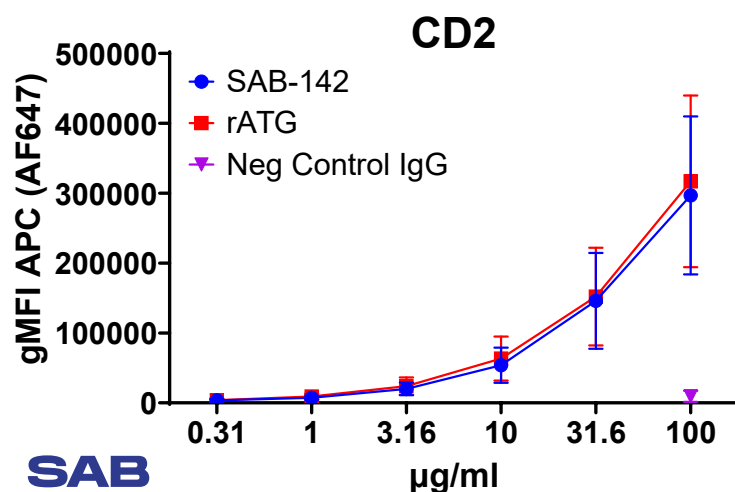
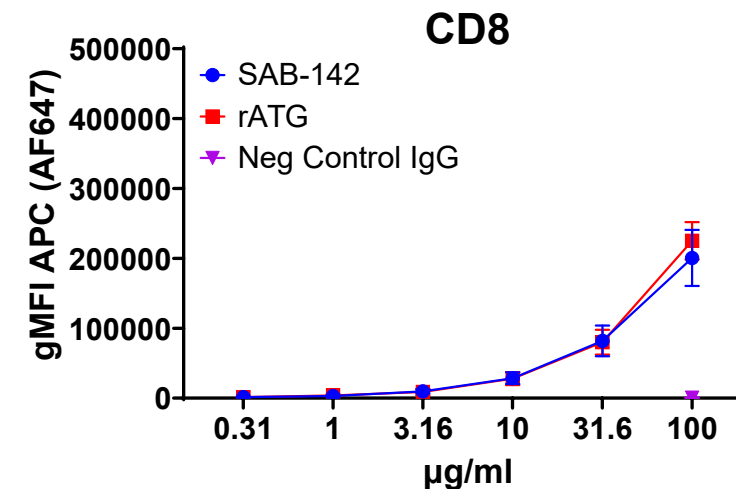
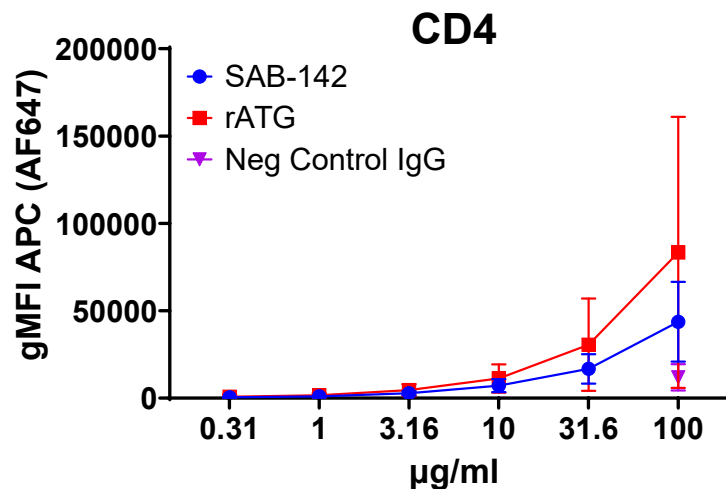
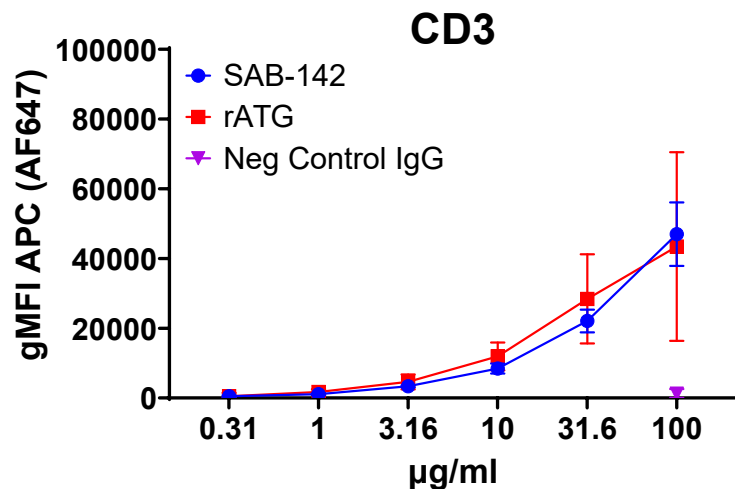
2) Directly label ATG antibodies, incubate with Bw-CD2 cells and analyze by flow cytometry



3) Subtract background from total gMFI to generate results



SAB-142 binds to CD3, CD4, CD8, CD2, CD45 and HLA-DR equivalent to rATG



Summary

- Multiple clinical studies have shown that rATG has efficacy at preserving C-peptide.
- SAB-142, a fully human ATG, has a similar multi-specific binding profile to T cell surface proteins as rATG.
- Phase 1 data has shown SAB-142 to have a Mechanism of Action comparable to rATG, with notable improved safety and potential for repeat dosing.

Phase 2 Clinical Trial SAFEGUARD has Launched!

USA, Australia, New Zealand, UK, and EMA countries are approved.

SAB-142 Data in Depth at ATTD

Oral Presentation
Stan Stoyanov, MD

Breaking the Depletion Paradigm: Immunomodulation Without Sustained Lymphodepletion with SAB-142, a Fully Human, Multi-specific Anti-Thymocyte Globulin for T1D

Saturday, March 3rd Hall 116, 10:10 – 10:20 AM

Short Oral Presentation
Stan Stoyanov, MD

Charting the Safety Landscape of Multi-specific Modalities: Safety Profile of Multi-specific Anti-thymocyte Globulin SAB-142

Abstract # 548

E-Posters

- Beta Cell Guardians: Mechanism of Action of SAB-142, an Emerging Immunotherapy for New Onset T1D Abstract #: 569
- Tracking Multiplicity: in vitro and Clinical Pharmacokinetic Assays for Multi-target Therapeutics Abstract #: 473
- Improving the Integrity of Clinical Samples: Assessing Blood Preservation Methods for Analysis by Flow Cytometry Abstract #: 569