# Data Sheet (Cat.No.TMPY-06126)

TargetMol

## TACI Protein, Cynomolgus, Recombinant (His)

### General Information

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| Synonyms: | tumor necrosis factor receptor superfamily, member 13B |
| Protein Construction: | A DNA sequence encoding the cynomolgus TNFRSF13B (A0A2K5VNU0-1) (Ser2-Leu160) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Ser 2 |
| Species: | Cynomolgus |
| Expression Host: | HEK293 Cells |
| Accession: | A0A2K5VNU0-1 |
| Molecular Weight: | 19.2 kDa (predicted); 20.2 and 21.8 kDa (reducing conditions) |

### QC Testing

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| Biological Activity: | Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first. |
| Purity: | > 90 % as determined by SDS-PAGE. |
| Endotoxin: | < 1.0 EU/μg of the protein as determined by the LAL method. |
| Formulation: | Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization. |

### Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

Tumor necrosis factor receptor superfamily, member 13B (TNFRSF13B) also known as Transmembrane activator and CAML interactor (TACI) and CD267 antigen, is a member of the tumor necrosis factor receptor superfamily. TNFRSF13B is a trimeric cytokine receptor that binds tumor necrosis factors (TNF). The receptor cooperates with an adaptor protein which is important in determining the outcome of the response. Members of the TNF receptor superfamily (TNFRSF) have crucial roles in both innate and adaptive immunity and in cellular apoptosis process.

Apoptosis is a cell suicide mechanism that enables metazoans to control cell number in tissues and to eliminate individual cells that threaten the animal's survival. Certain cells have unique sensors, termed death receptors or tumour necrosis factor (TNFR), on their surface. Tumour necrosis factors (TNFR) detect the presence of extracellular death signals and, in response, they rapidly ignite the cell's intrinsic apoptosis machinery. TACI/TNFRSF13B/CD267 induces activation of the transcription factors NFAT, AP1, and NF-kappa-B and plays a crucial role in humoral immunity by interacting with a TNF ligand.

Reference

Salzer U,et al.(2005) Mutations in TNFRSF13B encoding TACI are associated with common variable immunodeficiency in humans. Nat Genet. 37(8): 820-8.
Salzer U,et al.(2009) Relevance of biallelic versus monoallelic TNFRSF13B mutations in distinguishing disease-causing from risk-increasing TNFRSF13B variants in antibody deficiency syndromes. Blood. 113(9): 1967-76.
Mohammadi J,et al.(2009) Novel mutations in TACI (TNFRSF13B) causing common variable immunodeficiency. J Clin Immunol. 29(6): 777-85.