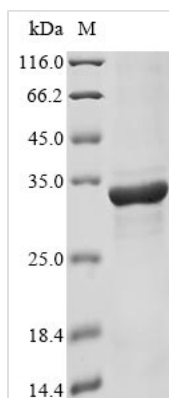




Recombinant Toxoplasma gondii Dense granule protein 2 (GRA2)

Product Code	CSB-EP320221TOV
Abbreviation	Recombinant Toxoplasma gondii GRA2 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P13404
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Toxoplasma gondii
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	AEFSGVVNQGPVDVPFSGKPLDERAVGGKGEHTPPLPDERQQEPEEPVSQR ASRVAEQLFRKFLKFAENVGHHSEKAFKKAKVVAEKGFTAAKTHTVRGFKVAK EAAGRGMVTVGKKLANVESDRSTTTTQAPDSPNGLAETVPVEPQQRAAHVP VPDFSQ
Research Area	Transport
Source	E.coli
Target Names	GRA2
Expression Region	24-185aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	25.0 kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Amino acids 24-185 constitute the expression domain of recombinant *Toxoplasma gondii* GRA2. The expected molecular weight for the GRA2 protein is calculated to be 25.0 kDa. This GRA2 protein is produced using *e.coli* expression system. The GRA2 gene fragment has been modified by fusing the N-terminal 10xHis tag and C-terminal Myc tag, providing convenience in detecting and purifying the recombinant GRA2 protein during the following stages.

Toxoplasma gondii dense granule protein 2 (GRA2) is a crucial component of the parasitic protozoan *T. gondii*'s dense granules, specialized secretory organelles involved in host cell invasion and establishment of the parasitophorous vacuole. GRA2 is secreted into the vacuole formed during invasion and contributes to the modification of this parasitophorous vacuole. It plays a role in the early events of host-pathogen interaction, possibly impacting host cell processes. GRA2 is recognized by the host immune system, eliciting an immune response during infection. Studies on GRA2 contribute to understanding *T. gondii*'s pathogenesis and host-parasite interactions, providing insights into potential targets for therapeutic interventions against toxoplasmosis, a disease caused by *T. gondii*.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.