Recombinant EEIG1 protein (His tag)

Catalog Number	545162
Synonyms	EEIG1
Species	Human
Expression System	E. coli
Accession	Q5T9C2
Molecular Weight	Predictes a molecular mass of 19.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	1-158
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-158 aa (Q5T9C2) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Early estrogen-induced gene 1 protein (EEIG1) fragment (amino acids 1-158) from Homo sapiens, encompassing the complete C2 NT-type functional domain. This high-purity fragment is an essential tool for investigating domain-specific mechanisms in osteoclastogenesis and estrogen-related pathways, enabling targeted research in bone resorption and hormonal signaling. The full-length Early estrogen-induced gene 1 protein (EEIG1) is a critical mediator in TNFSF11/RANKL- and TNF-induced osteoclastogenesis, directly contributing to pathological bone loss by facilitating bone resorption. It interacts with TNFRSF11A/RANK to promote downstream transcription of NFATC1 and activation of PLCG2, while also recruiting the transcriptional repressor PRDM1/BLIMP1 to suppress IRF8, thereby driving osteoclast differentiation. EEIG1 may additionally play a role in estrogen-mediated processes. Subcellular localization studies indicate its presence in the nucleus, cytoplasm, and membrane rafts, reflecting its involvement in diverse cellular compartments and signaling contexts.