Recombinant PIR protein (His tag)

Catalog Number	541709
Synonyms	Probable quercetin 2,3-dioxygenase PIR; Probable quercetinase
Species	Human
Expression System	E. coli
Accession	O00625
Molecular Weight	Predictes a molecular mass of 33.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-290
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 1-290 aa (O00625) 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 Human Pirin (EC 1.13.11.24) Fragment (1-290) - A high-quality recombinant protein representing the full-length soluble domain of Pirin, optimized for structural and biochemical studies. This fragment maintains key functional characteristics including quercetin 2,3-dioxygenase activity and redox-dependent transcriptional coregulation capabilities. Pirin (PIR) is a multifunctional protein that serves as a transcriptional coregulator of NF-kappa-B, facilitating the binding of NF-kappa-B proteins to target kappa-B genes in a redox-state-dependent manner. It plays a crucial role in hematopoietic cell maturation and demonstrates quercetin 2,3-dioxygenase activity in vitro. Pirin exhibits dynamic subcellular localization, predominantly found in dot-like subnuclear structures within the nucleus, with cytoplasmic localization that appears to correlate with melanoma progression. The protein's dual localization and redox-sensitive regulatory functions make it an important target for studying cellular signaling pathways and disease mechanisms.