



Human CAT blocking peptide (CDBP0696)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Blocking/Immunizing peptide for anti-Catalase/CAT antibody
Antigen Description	This gene encodes catalase, a key antioxidant enzyme in the bodies defense against oxidative stress. Catalase is a heme enzyme that is present in the peroxisome of nearly all aerobic cells. Catalase converts the reactive oxygen species hydrogen peroxide to water and oxygen and thereby mitigates the toxic effects of hydrogen peroxide. Oxidative stress is hypothesized to play a role in the development of many chronic or late-onset diseases such as diabetes, asthma, Alzheimer's disease, systemic lupus erythematosus, rheumatoid arthritis, and cancers. Polymorphisms in this gene have been associated with decreases in catalase activity but, to date, acatalasemia is the only disease known to be caused by this gene. [provided by RefSeq, Oct 2009]
Species	Human
Conjugate	Unconjugated
Applications	Apuri, BL, ELISA
Format	Lyophilized powder
Size	100 µg
Preservative	None
Storage	Shipped at ambient temperature, store at -20°C.

GENE INFORMATION

Gene Name	CAT catalase [Homo sapiens (human)]
Official Symbol	CAT

Synonyms	CAT; catalase;
Entrez Gene ID	847
mRNA Refseq	NM_001752.3
Protein Refseq	NP_001743.1
UniProt ID	P04040
Chromosome Location	11p13
Pathway	Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), conserved biosystem; Cellular responses to stress, organism-specific biosystem; DNA damage response (only ATM dependent), organism-specific biosystem; Detoxification of Reactive Oxygen Species, organism-specific biosystem; Folate Metabolism, organism-specific biosystem; FoxO family signaling, organism-specific biosystem; FoxO sig
Function	NADP binding; aminoacylase activity; antioxidant activity; catalase activity; catalase activity; enzyme binding; heme binding; metal ion binding; oxidoreductase activity, acting on peroxide as acceptor; protein homodimerization activity; receptor binding;