

ELA2 monoclonal antibody (M04A), clone 4E12

Catalog # H00001991-M04A Size 200 uL

Specification	
Product Description	Mouse monoclonal antibody raised against a partial recombinant ELA2.
Immunogen	ELA2 (NP_001963, 168 a.a. ~ 267 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	VLQELNVTVVTSLCRRSNVCTLVRGRQAGVCFGDSGSPLVCNGLIHGIASFVRGGCASGLYPDAF APVAQFVNWIDSIIQRSEDNPCPHPRDPDPASRTH
Host	Mouse
Reactivity	Human
Isotype	lgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Storage Buffer	In ascites fluid
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

ELISA

Gene Info — ELA2	
Entrez GenelD	<u>1991</u>
GeneBank Accession#	NM_001972
Protein Accession#	NP_001963
Gene Name	ELA2



Product Information

Gene Alias	GE, HLE, HNE, NE, PMN-E
Gene Description	elastase 2, neutrophil
Omim ID	<u>130130</u> <u>162800</u> <u>202700</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode the structurally similar proteins. The product of this gene hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix following the protein's release from activated neutrophils. The enzyme may play a role in degenerative and inflammatory diseases by its proteolysis of coll agen-IV and elastin of the extracellular matrix. This protein degrades the outer membrane protein A (OmpA) of E. coli as well as the virulence factors of such bacteria as Shigella, Salmonella and Y ersinia. Mutations in this gene are associated with cyclic neutropenia and severe congenital neutropenia (SCN). This gene is clustered with other serine protease gene family members, azurocidin 1 and proteinase 3 genes, at chromosome 19pter. All 3 genes are expressed coordinately and their protein products are packaged together into azurophil granules during neutrophil differentiation. [provided by RefSeq
Other Designations	bone marrow serine protease granulocyte-derived elastase leukocyte elastase medullasin polymorphonuclear elastase

Pathway

Systemic lupus erythematosus

Disease

- Chronic Disease
- Coronary Disease
- Genetic Predisposition to Disease
- Liver Cirrhosis
- Lung Neoplasms
- Myocardial Infarction
- Neutropenia
- Pulmonary Disease