



## Recombinant Human ApoE3

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-125</b>
Size:	500 µg
Lot. No.:	According to product label

### Scientific Background

<b>Gene-ID (NCBI):</b>	348
<b>Synonyms:</b>	APOE; AD2; LPG; LDLCQ5

ApoE3 belongs to a group of proteins that bind reversibly with lipoprotein and play an important role in lipid metabolism. In addition to facilitating solubilization of lipids, these proteins help to maintain the structural integrity of lipoproteins, serve as ligands for lipoprotein receptors, and regulate the activity of enzymes involved in lipid metabolism. Significant quantities of ApoE are produced in liver and brain and to some extent in almost every organ. ApoE exists in three major isoforms; E2, E3, and E4, which differ from one another by a single amino-acid substitution. E3 is the most common isoform and is present in 40-90% of the population. Recombinant human ApoE3 is a 34.0 kDa protein containing 300 amino acid residues.

### Sequence

```
MKVEQAVETE PEPFLRQQTE WQSGQRWELA LGRFWDYLRW
VQTLSEQVQE ELLSSQVTQE LRALMDETMM ELKAYKSELE
EQLTPVAEET RARLSKELQA AQARLGADME DVCGRIVQYR
GEVQAMLGQS TEELRVRLAS HLRKLRKRLR RDADDLQKRL
AVYQAGAREG AERGLSAIRE RLGPLVEQGR VRAATVGSLSA
GQPLQERAQA WGERLRARME EMGSRTDRDL DEVKEQVAEV
RAKLEEQAQQ IRLQAEAFQA RLKSWFEPLV EDMQRQWAGL
VEKVQAAVGT SAAPVPSDNH
```

### Database References

<b>Protein RefSeq:</b>	NP_000032.1
<b>Uniprot ID:</b>	P02649
<b>mRNA RefSeq:</b>	NM_000041.2

### Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 90% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	299
<b>MW:</b>	34.4 kDa

**Biological Activity:** Data not available.



**AVOID REPEATED FREEZE AND THAW CYCLES!**