

Rabbit Anti-FMO2 antibody

SL16153R

Product Name:	FMO2
Chinese Name:	肝黄素单加氧酶2抗体
Alias:	2310008D08Rik; 2310042I22Rik; AW107733; Dimethylaniline monooxygenase [N oxide forming] 2; Dimethylaniline monooxygenase [N-oxide-forming] 2; Dimethylaniline oxidase 2; Flavin containing monooxygenase 2 (non functional); Flavin containing monooxygenase 2; FLJ40826; FMO 1B1; FMO 2; FMO; FMO pulmonary; FMO1B1; FMO2; FMO2_HUMAN; MGC28212; OTTMUSP00000028686; OTTMUSP00000028687; Pulmonary flavin containing monooxygenase 2; Pulmonary flavin-containing monooxygenase 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Horse, Rabbit, Sheep, Chimpanzee,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	53kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FMO2:51-150/471
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The flavin-containing monooxygenases are NADPH-dependent enzymes that catalyze

the oxidation of many drugs and xenobiotics. In most mammals, there is a flavin-containing monooxygenase that catalyzes the N-oxidation of some primary alkylamines through an N-hydroxylamine intermediate. However, in some human populations, this enzyme is truncated and likely degraded rapidly. The protein encoded by this gene represents the truncated form and apparently has no catalytic activity. A functional allele found in African Americans has been reported, but no sequence evidence has been deposited to support the finding. This gene is found in a cluster with the FMO1, FMO3, and FMO4 genes on chromosome 1. [provided by RefSeq, Jun 2013]

Function:

Catalyzes the N-oxidation of certain primary alkylamines to their oximes via an N-hydroxylamine intermediate. Inactive toward certain tertiary amines, such as imipramine or chloropromazine. Can catalyze the S-oxidation of methimazole. The truncated form is catalytically inactive.

Subcellular Location:

Microsome membrane. Endoplasmic reticulum membrane.

Tissue Specificity:

Expressed in lung (at protein level). Expressed predominantly in lung, and at a much lesser extent in kidney. Also expressed in fetal lung, but not in liver, kidney and brain.

Post-translational modifications:

The truncated form is probably unable to fold correctly and is rapidly degraded. FMO2*1 is sumoylated at 'Lys-492'.

Similarity:

Belongs to the FMO family.

SWISS:

Q99518

Gene ID:

2327

Database links:

Entrez Gene: 2327 Human

Entrez Gene: 55990 Mouse

Entrez Gene: 100171693 Orangutan

Entrez Gene: 703639 Rhesus monkey

Omim: 603955 Human

SwissProt: Q8HZ70 Chimpanzee

SwissProt: Q8HZ69 Gorilla

SwissProt: P36366 Guinea pig

SwissProt: Q99518 Human

SwissProt: Q8K2I3 Mouse

SwissProt: Q5REK0 Orangutan

SwissProt: Q28505 Rhesus monkey

Unigene: 144912 Human

Unigene: 10929 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.