

## Product datasheet for **DM3583P**

### KI Rat Monoclonal Antibody [Clone ID: 4F54]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	4F54
Applications:	IHC, WB
Recommended Dilution:	<b>Western Blot:</b> 1/500-1/1000. <b>Immunohistochemistry on Frozen Sections:</b> 1/50-1/200.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2
Clonality:	Monoclonal
Immunogen:	Purified Mouse Recombinant protein of Klotho
Specificity:	This antibody detects Mouse Klotho. Other species not tested.
Formulation:	0.2 µm filtered solution in PBS State: Purified State: Lyophilized purified IgG fraction from Culture Supernatant Stabilizer: None
Reconstitution Method:	Restore with 200 µl sterile PBS and the final concentration is 500 µg/ml.
Purification:	Protein A/G Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at -70°C. Following reconstitution store the antibody (in aliquots) at -20°C for 6 month. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	klotho
Database Link:	<a href="#">Entrez Gene 16591 Mouse O35082</a>



[View online »](#)

**Background:**

Animal models of human aging which display the characteristic diseases associated with aging provide insight into the cause of such diseases. Recently a transgenic mouse model, called Klotho, with several premature aging phenotypes has been described. They display premature aging phenotypes such as Osteoporosis, age related skin changes, ectopic calcifications, atrophy of genital organs and thymus, emphysema and short life span. Klotho (Kl) protein associated with the Klotho mutation is a 1014 amino acid long peptide. It has a putative signal sequence at its N-terminus and a single transmembrane domain near its C-terminus, which is postulated to anchor it to the membrane. kl gene expression was observed to be tissue specific. Improvement of systemic aging phenotypes in kl/kl mice occurs even when the exogenous expression was limited to some organs, suggesting that KL associated aging is regulated through a humoral signaling pathway. KL has been reported to be localized on the cell surface when expressed on Cho cells. Human kl cDNA is expected to encode a protein of 1012 amino acids.

**Synonyms:**

KL, Klotho, EC 3.2.1.31