

Product datasheet for TA336752

LOX Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

FC, ICC/IF, IP, Simple Western, WB **Applications:**

Recommended Dilution: Immunoprecipitation: 1:10-1:500, Flow Cytometry: 1:200, Immunocytochemistry/

Immunofluorescence: 1:200, Western Blot: 0.5 ug/ml, Simple Western: 1:200

Reactivity: Human, Rat

Host: Rabbit

Clonality: Polyclonal

Synthetic peptide made to an internal portion of human LOX propeptide (within residues Immunogen:

118-168). [Swiss-Prot# P28300]

Formulation: PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

lot specific Concentration:

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Store at -20°C as received. Storage:

Stability: Stable for 12 months from date of receipt.

Gene Name: lysyl oxidase **Database Link:** NP 002308

Entrez Gene 24914 RatEntrez Gene 4015 Human

P28300



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Background:

Lysyl oxidase (LOX) is a critical enzyme in extracellular matrix biosynthesis as well as in the maintainance of normal bone phenotype. It is synthesized/secreted as a 50-kD proenzyme 'pro-LOX' which is then processed to 30-kD mature enzyme 'LOX' and 18-kD lysyl oxidase propeptide 'LOX-PP' by extracellular procollagen C-proteinases (BMP1, Tll1, and Tll2). LOX-PP has been proposed to implicate in the maintenance of inactive state of LOX within the secretory pathway and to act as intramolecular chaperones which facilitate the accurate protein folding/targeting to correct destinations. LOX-PP involves tumor suppression by inhibiting RAS-dependent cellular transformation and its expression has also been associated with inhibition of anchorage-independent progression as well as migration and growth suppression xenografts in Her-2/neu-driven breast cancer. LOX-PP also inhibits PI3K/AKT and ERK1/2 MAP kinase pathways, as well as the levels of downstream NF-kB/cyclin D1 signals in certain cancers - breast, pancreatic, lung, prostate and oral cancers. LOX-PP has also been shown to inhibit DNA synthesis in rat's VSMCs cultures, osteoblast proliferation and FGF-2 signaling.

Synonyms: MGC105112

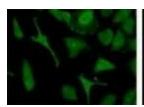
Note: This LOX propeptide antibody is useful for Flow Cytometry,

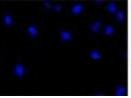
Immunocytochemistry/Immunofluorescence, Immunoprecipitation (PMID: 21536655) and Western Blot. In WB a band can be seen at \sim 35 kDa (glycosylated propeptide form) and at

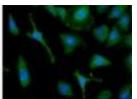
~50 kDa (proenzyme form).

Protein Families: Druggable Genome, Secreted Protein

Product images:





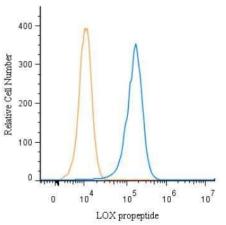


Immunocytochemistry/Immunofluorescence: LOX propeptide Antibody TA336752 - Staining in Hela cells detected with a Dylight 488 labeled secondary antibody (Green) with Hoechst 33258 nuclear counterstain (Blue).

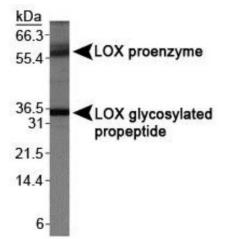




Simple Western: LOX propeptide Antibody TA336752 - Simple Western lane view shows a specific band for LOX in 0.5 mg/ml of MCF-7 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



Flow Cytometry: LOX propeptide Antibody TA336752 - An intracellular stain was performed on HeLa with LOX propeptide Antibody TA336752 and a matched isotype control. Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature, followed by Rabbit lgG (H+L) Cross-Adsorbed Secondary Antibody, .



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Western Blot: LOX propeptide Antibody TA336752 - Analysis of LOX propeptide on MDA-MB-231 using TA336752.