

## Product datasheet for TA392604

## **KDM6A Rabbit Polyclonal Antibody**

## **Product data:**

**Product Type: Primary Antibodies** 

**Applications:** 

Recommended Dilution: WB: 1:1000~1:2000

Reactivity: Human Rabbit Host: Isotype: lgG

Polyclonal Clonality:

Immunogen: Synthetic peptide, corresponding to Human UTX.

Specificity: UTX polyclonal antibody detects endogenous levels of UTX protein.

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.4. Formulation:

Concentration: 1mg/ml

Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Stability: 1 year

**Predicted Protein Size:** ~ 155 kDa

Gene Name: lysine demethylase 6A Database Link: Entrez Gene 7403 Human

O15550



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Background:

The methylation state of lysine residues in histone proteins is a major determinant of the formation of active and inactive regions of the genome and is crucial for proper programming of the genome during development. Jumonji C (JmjC) domain-containing proteins represent the largest class of potential histone demethylase proteins. The JmjC domain can catalyze the demethylation of mono-, di-, and tri-methyl lysine residues via an oxidative reaction that requires iron and α-ketoglutarate. Based on homology, both humans and mice contain at least 30 such proteins, which can be divided into 7 separate families. The three members of the UTX/UTY family include the ubiquitously transcribed X chromosome tetratricopeptide repeat protein (UTX), the ubiquitously transcribed Y chromosome tetratricopeptide repeat protein (UTY) and JmjC domain-containing protein 3 (JMJD3). This family of proteins has been shown to demethylate both di- and tri-methyl histone H3 Lys 27. The UTX gene escapes X inactivation in females and is ubiquitously expressed. UTX functions to regulate HOX gene expression during development . JMJD3 functions to regulate gene expression in macrophages responding to various inflammatory stimuli and has been shown to be upregulated in prostate cancer. Both UTX and JMJD3 interact with mixed-lineage leukemia (MLL) complexes 2 and 3, both of which have been shown to methylate histone H3 at Lys4. The UTY gene is expressed in most tissues in the male mouse.

Synonyms:

HistonedemethylaseUTX; KDM6A; Lysine-specific demethylase 6A; Ubiquitously-transcribed TPR protein on the X chromosome; Ubiquitously-transcribed X chromosome tetratricopeptide repeat protein; UTX

Note:

For research use only, not for use in diagnostic procedure.