

## UTX polyclonal antibody

Catalog: GCP82

Host: Rabbit

Reactivity: Human

### 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  $\alpha$ -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.

### Product:

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

### Molecular Weight:

~ 155 kDa

### Swiss-Prot:

O15550

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:1000~1:2000

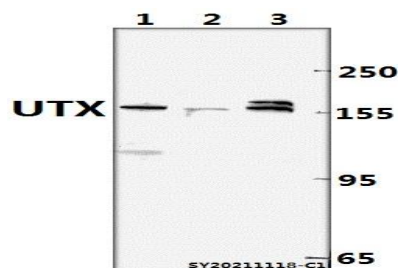
### Storage&Stability:

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

### Specificity:

UTX polyclonal antibody detects endogenous levels of UTX protein.

### DATA:



Western blot (WB) analysis of UTX polyclonal antibody at 1:1000 dilution

Lane1:MCF-7 whole cell lysate(40ug)

Lane2:Hela whole cell lysate(40ug)

Lane3:U-87MG whole cell lysate(40ug)

### Note:

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

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