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## OTX2 Rabbit pAb

Catalog Number: bs-11597R

Target Protein: OTX2

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ICC/IF (1:100-500), ELISA (1:5000-10000)

Reactivity: (predicted:Human, Mouse, Rat, Sheep, Cow, Chicken, Dog, Horse)

Predicted MW: 32 kDa

Entrez Gene: 5015

Swiss Prot: P32243

Source: KLH conjugated synthetic peptide derived from human OTX2: 15-105/289.

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Transcription factors, OTX1 and OTX2, are two murine homologs of the Drosophila orthodenticle (OTD), show a limited amino acid sequence divergence. OTX1 and OTX2 play an important role during early and later events required for proper brain development in that they are involved in the processes of induction, specification and regionalization of the brain. OTX1 is involved in corticogenesis, sensory organ development and pituitary functions, while OTX2 is necessary earlier in development, for the correct anterior neural plate specification and organization of the primitive streak. OTX2 is also required in the early specification of the neuroectoderm, which is destined to become the fore-midbrain, and both OTX1 and OTX2 co-operate in patterning the developing brain through a dosage-dependent mechanism. A molecular mechanism depending on a precise threshold of OTX proteins is necessary for the correct positioning of the isthmus region and for anterior brain patterning. The genes which encode OTX1 and OTX2 map to human chromosomes 2p13 and 14q21-q22, respectively.

### PRODUCT SPECIFIC PUBLICATIONS

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[IF=3.315] Li Z et al. Rapid Differentiation of Multi-Zone Ocular Cells from Human Induced Pluripotent Stem Cells and Generation of Corneal Epithelial and Endothelial Cells. Stem Cells Dev. 2019 Mar 5. IF ; Human . 30712489