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Rabbit Anti-ZNF423 antibody

SL12220R

Product Name:	ZNF423
Chinese Name:	Zinc finger protein423抗体
Alias:	Early B cell factor associated zinc finger protein; Ebfaz; hOAZ; Nur12; OAZ; OLF 1/EBF associated zinc finger; OLF1/EBF associated zinc finger protein; Olf1/EBF-associated zinc finger protein; Roaz; Smad and Olf interacting zinc finger protein; Smad- and Olf-interacting zinc finger protein; Zfp104; ZFP423; zinc finger protein 423, mouse, homolog of; Zinc finger protein 423; ZN423_HUMAN; ZNF423; ZNF423 zinc finger protein 423.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Zebrafish,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	145kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Human ZNF423/OAZ:901-1000/1284
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	OAZ is a 30-zinc finger, DNA-binding factor that associates with members of the Smad family of transcription factors in response to BMP2 activation. Bone morphogenic

proteins (BMPs), are the largest group within the TGF Beta growth factors superfamily and are involved in embryonic development, specifically the formation of left-right asymmetry, neurogenesis, organogenesis and skeletal development. BMPs bind to surface receptors, which then phosphorylate serine residues of specific Smad proteins to induce Smad translocation to the nucleus and transcriptional activation of BMP targeted genes. OAZ specifically cooperates with the BMP-activated Smads, namely Smad1, 5 and 8, in binding to the CAGAC and TGGAGC boxes within the BRE, or BMP response element, and activating transcription. OAZ contains a BMP signaling module formed by two clusters of fingers that individually associate with either the Smads or the BMP response element. Distinct regions of OAZ, separate from the modules involved in BMP regulation, also enable OAZ to function as a transcriptional partner of Olf-1/EBF in olfactory epithelium and lymphocyte development, indicating that, as a multi–zinc finger protein, OAZ may have dual roles in signal transduction during development.

Function:
Transcription factor that can both act as an activator or a repressor depending on the context. Plays a central role in BMP signaling and olfactory neurogenesis. Associates with SMADs in response to BMP2 leading to activate transcription of BMP target genes. Acts as a transcriptional repressor via its interaction with EBF1, a transcription factor involved in terminal olfactory receptor neurons differentiation; this interaction preventing EBF1 to bind DNA and activate olfactory-specific genes. Involved in olfactory neurogenesis by participating in a developmental switch that regulates the transition from differentiation to maturation in olfactory receptor neurons. Controls proliferation and differentiation of neural precursors in cerebellar vermis formation.

Subunit:
Homodimer (By similarity). Interacts with EBF1 (By similarity). Interacts with SMAD1 and SMAD4. Interacts with PARP1. Interacts with CEP290.

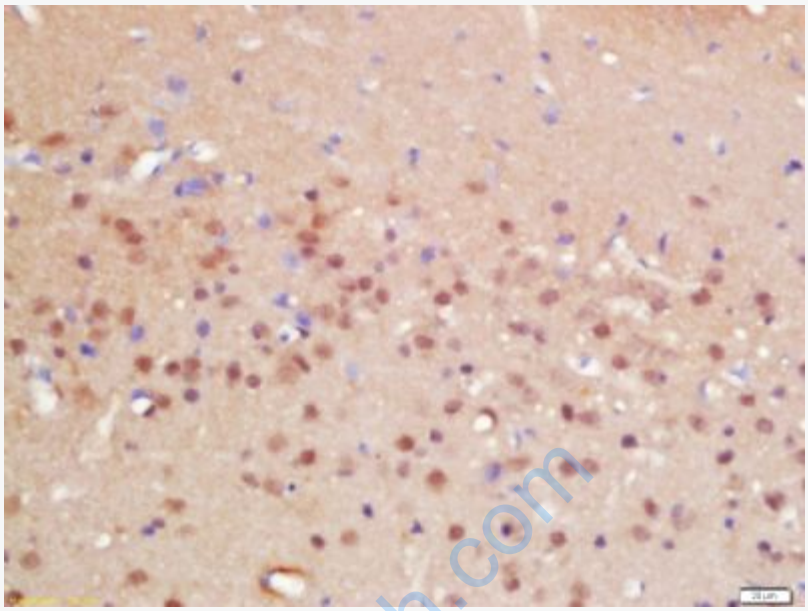
Subcellular Location:
Nucleus.

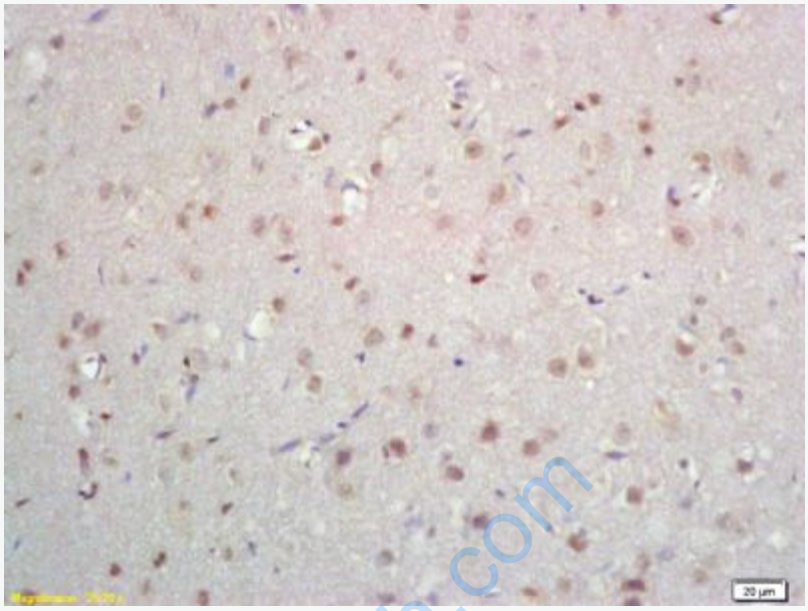
Tissue Specificity:
Expressed in brain, lung, skeletal muscle, heart, pancreas and kidney but not liver or placenta. Also expressed in aorta, ovary, pituitary, small intestine, fetal brain, fetal kidney and, within the adult brain, in the substantia nigra, medulla, amygdala, thalamus and cerebellum.

DISEASE:
Note=Defects in ZNF423 can be a cause of nephronophthisis-related ciliopathies (NPHP-RC), a group of recessive diseases that affect kidney, retina and brain. ZNF423 mutations have been found in patients with nephronophthisis, cerebellar vermis hypoplasia and situs inversus, and Joubert syndrome.

Similarity:
Belongs to the krueppel C2H2-type zinc-finger protein family.

	Contains 30 C2H2-type zinc fingers. **SWISS:** Q2M1K9 **Gene ID:** 23090 **Database links:** Entrez Gene: 23090 Human Entrez Gene: 94187 Mouse Entrez Gene: 94188 Rat Entrez Gene: 566696 Zebrafish Omim: 604557 Human SwissProt: Q2M1K9 Human SwissProt: Q80TS5 Mouse SwissProt: O08961 Rat SwissProt: A1L1R6 Zebrafish Unigene: 530930 Human Unigene: 23452 Mouse Unigene: 472447 Mouse Unigene: 9981 Rat Unigene: 132594 Zebrafish **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-ZNF423 Polyclonal Antibody, Unconjugated(SL12220R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-ZNF423/OAZ Polyclonal Antibody, Unconjugated(SL12220R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining