bs-11200R **[Primary Antibody]**

LHX2 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 9355 **SWISS:** P50458

Target: LHX2

Immunogen: KLH conjugated synthetic peptide derived from human LHX2: 251-330/406.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

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: During development, genetically distinct subtypes of motor neurons express unique combinations of LIM-type homeodomain factors, which regulate cell migration and guide motor axons to establish the fidelity of a binary choice in axonal trajectory. The LIM gene family encodes a set of gene products, which carry the LIM domain, a unique cysteine-rich zinc-binding domain. At least 40 members of this family have been identified in vertebrates and invertebrates, and are distributed into 4 groups according to the number of LIM domains and to the presence of homeodomains and kinase domains. The overlapping expression of LHX1, LHX3, LHX4, Isl-1 and Isl-2 in developing motor neurons along the spinal column may influence the establishment of specific motor neuron subtypes. The human LHX2 gene maps to chromosome 9q33.3 and encodes a 389 amino acid protein. LHX2 is involved in early patterning of the telencephalon, where the neuroepithelium is first divided into cortical tissue and cortical hem.

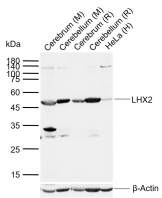
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1μg/Test)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Pig, Cow, Chicken, Horse)

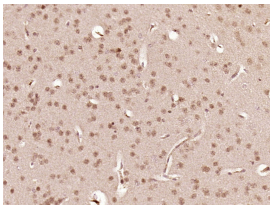
Predicted MW.: 45 kDa

Subcellular Location: Nucleus

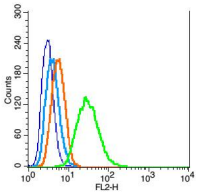
VALIDATION IMAGES



Sample: Lane 1: Mouse Cerebrum tissue lysates Lane 2: Mouse Cerebellum tissue lysates Lane 3: Rat Cerebrum tissue lysates Lane 4: Rat Cerebellum tissue lysates Lane 5: Human HeLa cell lysates Primary: Anti-LHX2 (bs-11200R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 45 kDa Observed band size: 47 kDa



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (LHX2) Polyclonal Antibody, Unconjugated (bs-11200R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice. Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1μg in 100 μL1X PBS containing 0.5% BSA(green).

SELECTED CITATIONS

- **[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
- **[IF=2.8]** Guangxian Zhou. et al. Potential Involvement of miR-144 in the Regulation of Hair Follicle Development and

Cycle Through Interaction with Lhx2. GENES-BASEL. 2024 Nov;15(11):1454 WB ;Rat. 39596654
- **[IF=1.36]** Geng, Rongqing, et al. "Cyclic expression of Lhx2 is involved in secondary hair follicle development in cashmere goat." Gene Expression Patterns (2014). IHC ;="Goat". 25128627