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The Sensory Circumventricular Organs of the Mammalian Brain

Subfornical Organ,
OVLT and Area Postrema

With 28 Figures



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Abbreviations

ACE	angiotensin converting enzyme
ACTH	adrenocorticotropic hormone
AMPA	alpha-amino-3-hydroxy-5-methylisoxazole-4-propionic acid
ANP	atrial natriuretic peptide
AP	area postrema
AV3V	anteroventral third ventricular wall region
BNP	brain natriuretic peptide
BNST	bed nucleus of the stria terminalis
CCK	cholecystokinin
CGRP	calcitonin gene related peptide
CLIP	coticotropin-like intermediate lobe peptide
CLR	calcitonin-like receptor
CNP	c-type natriuretic peptide
CNS	central nervous system
CSF	cerebrospinal fluid
CTB-gold	cholera toxin b subunit-gold conjugate
CT-HRP	cholera toxin b subunit-horseradish peroxidase conjugate
CVO	circumventricular organ
CVLM	caudal ventrolateral medulla
DNA	deoxyribonucleic acid
Fos-IR	Fos-immunoreactivity
GABA	gamma amino butyric acid
GAD	glutamic acid decarboxylase
GLP-1	glucagon-like peptide-1
HRP	horseradish peroxidase
ICV	intracerebroventricular
IL-1 β	interleukin-1 beta
IL-6	interleukin-6
iNOS	inducible nitric oxide synthase
LHRH	luteinising hormone releasing hormone
L-NAME	NG-nitro-L-arginine methyl ester
LPS	lipopolysaccharide
MnPO	median preoptic nucleus
mRNA	messenger ribonucleic acid
MS	melanocyte stimulating hormone
NADPH	nicotinamide adenine di nucleotide phosphate

NMDA	N-methyl-D-aspartic acid
nNOS	neuronal nitric oxide synthase
NO	nitric oxide
NPY	neuropeptide Y
NTS	nucleus of the solitary tract
OVLTF	organum vasculosum of the lamina terminalis
PGE ₂	prostaglandins E2
PHA-L	phaseolus vulgaris leucoagglutinin
PS	permeability x surface area product
PVN	hypothalamic paraventricular nucleus
PYY	peptide YY
RAMP	receptor-activated modifying protein
RVLM	rostral ventrolateral medulla
SFO	subfornical organ
SOCS-3	suppressor of cytokine signalling-3
SRIF	somatostatin
TLR-4	toll-like receptor 4
TNF- α	tumour necrosis factor alpha
WGA	wheat germ agglutinin
WGA-HRP	wheat germ agglutinin-horseradish peroxidase conjugate