

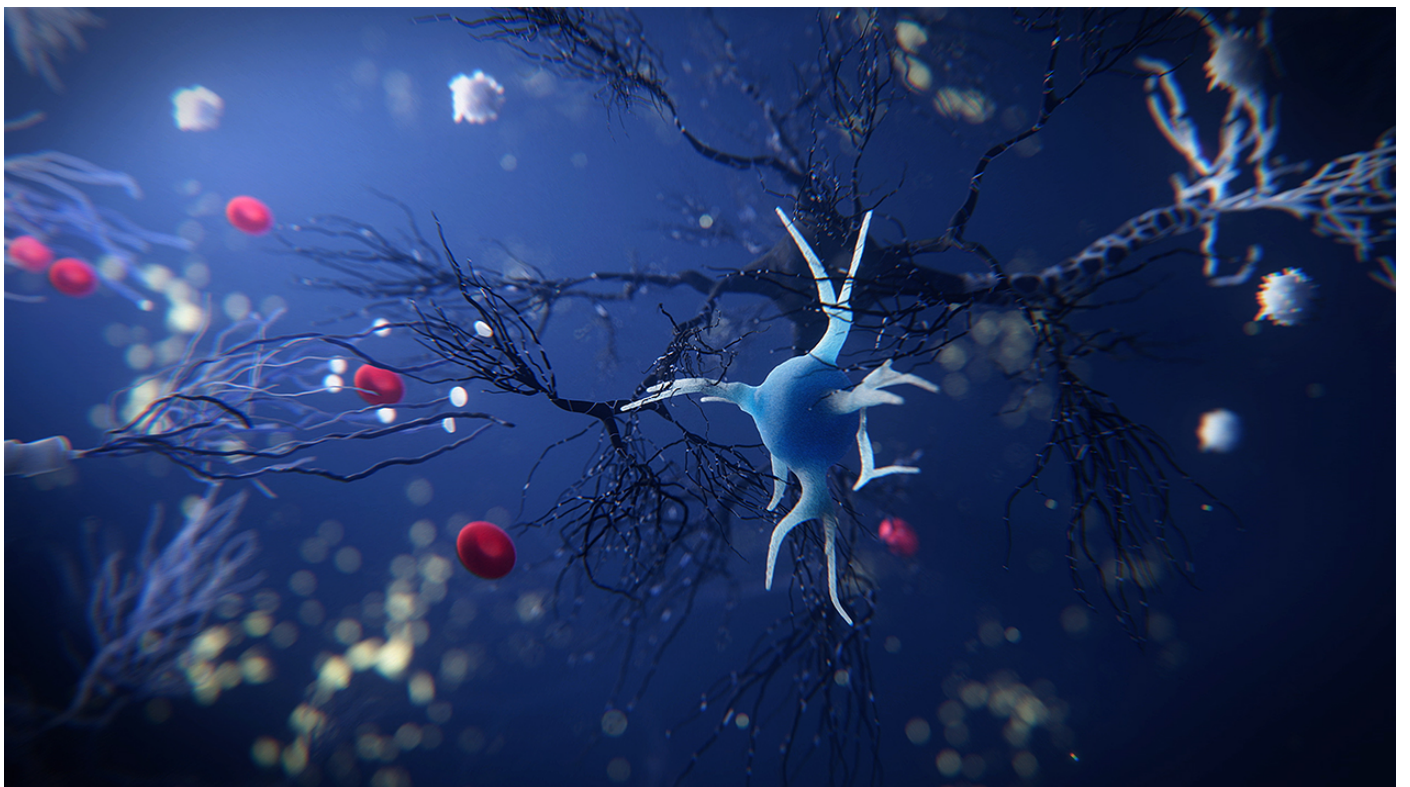
SYSY – Antibodies

SYSY

- [SYSY](#)
- [SYSY](#)
- [SYSY](#)
- [SYSY](#)
- [SYSY](#)
- [SYSY](#)
- [SYSY](#)
- [SYSY](#)

SYSY

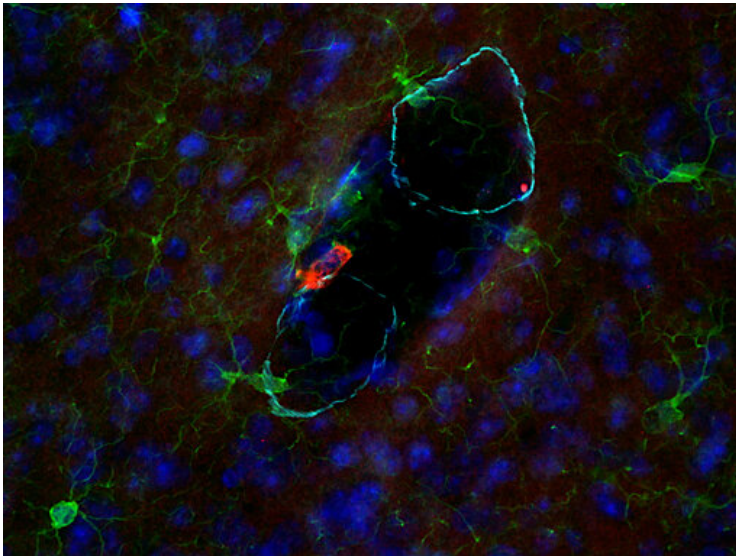
SYSY CNS COVID-19 (Tohidpour et al., 2017) PRRs PAMPs LPS DAMPs ATP PRRs (Chaney et al., 2021) α - β



SYSY CNS

SYSY

SYSY BAMs M1 M2 M1 M2 A1/A2



6 CD206 BAMs SMA-CD206 (cat. no. [HS-488 003](#), DAB,) IBA1 (cat. no. [HS-234 017](#), AP-RED,)

7 CD163 IBA1 SMA-CD163 (cat. no. [HS-455 003](#), 2 µg/ml,) IBA1 (cat. no. [234 011](#), 1:500,) -α- (SMA) (cat. no. [449 004](#), 1:500,) PFA DAPI

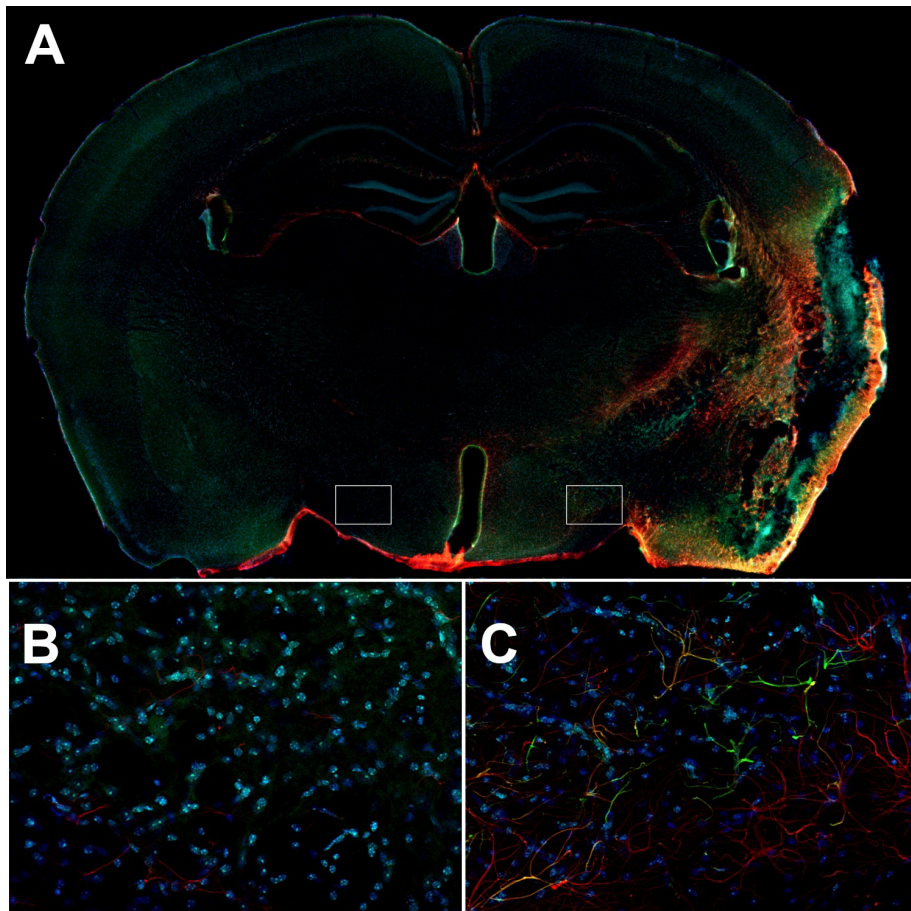
Products border-associated macrophages - BAMs

Cat. No.	Product Description	Application	Quantity	Price	Cart
375-0P	CD11c, control peptide		100 µg	US\$110.00	
HS-375 003	CD11c, rabbit, affinity <i>mouse specific</i>	WB IHC IHC-P (FFPE)	200 µl	US\$375.00	
HS-375 004	CD11c, Guinea pig, antiserum <i>mouse specific</i>	WB IHC IHC-P (FFPE)	100 µl	US\$355.00	
HS-375 008	CD11c, rabbit, recombinant IgG <i>mouse specific</i>	IHC IHC-P (FFPE)	50 µg	US\$420.00	
HS-375 013	CD11c, rabbit, affinity	WB IHC IHC-P (FFPE)	50 µg	US\$375.00	
HS-375 017	CD11c, rat, IgG <i>mouse specific</i>	IHC IHC-P (FFPE) IHC-Fr	100 µg	US\$420.00	
HS-455 003	CD163, rabbit, affinity <i>mouse specific</i>	WB IHC IHC-P (FFPE)	200 µl	US\$375.00	
HS-455 004	CD163, Guinea pig, antiserum <i>mouse specific</i>	IHC IHC-P (FFPE)	100 µl	US\$355.00	
HS-455 013	CD163, rabbit, affinity <i>human specific</i>	IHC IHC-P (FFPE)	50 µg	US\$375.00	
HS-455 014	CD163, Guinea pig, antiserum <i>human specific</i>	IHC-P (FFPE)	100 µl	US\$355.00	
HS-488 003	CD206, rabbit, affinity	WB ICC IHC IHC-P (FFPE)	50 µg	US\$375.00	
HS-488 005	CD206, Guinea pig, affinity	WB IHC IHC-P (FFPE)	50 µg	US\$420.00	
397 308	F4/80, Guinea pig, recombinant IgG	WB IHC IHC-P (FFPE)	50 µg	US\$420.00	
HS-397 004	F4/80, Guinea pig, antiserum	IHC IHC-P (FFPE)	100 µl	US\$355.00	
HS-397 008	F4/80, rabbit, recombinant IgG	WB IHC IHC-P (FFPE)	100 µl	US\$420.00	

Result count: 30

50% (Alghamri et al., 2021) (Chiareli et al., 2021)

GFP (Singh, 2022) (S100B (Higashino et al., 2009) ALDOC (Haddadi et al., 2022) EAAT1, GLAST (Beschoner et al., 2007) GS (Sandhu et al., 2021) Aβ (Chiarini, 2020) (Tang et al., 2021; Liddel et al., 2017; Escartin et al., 2021) EAAT2 (Dahlmanns et al., 2023) (Reid and Kuipers, 2021; Rothhammer and Quintana, 2015)



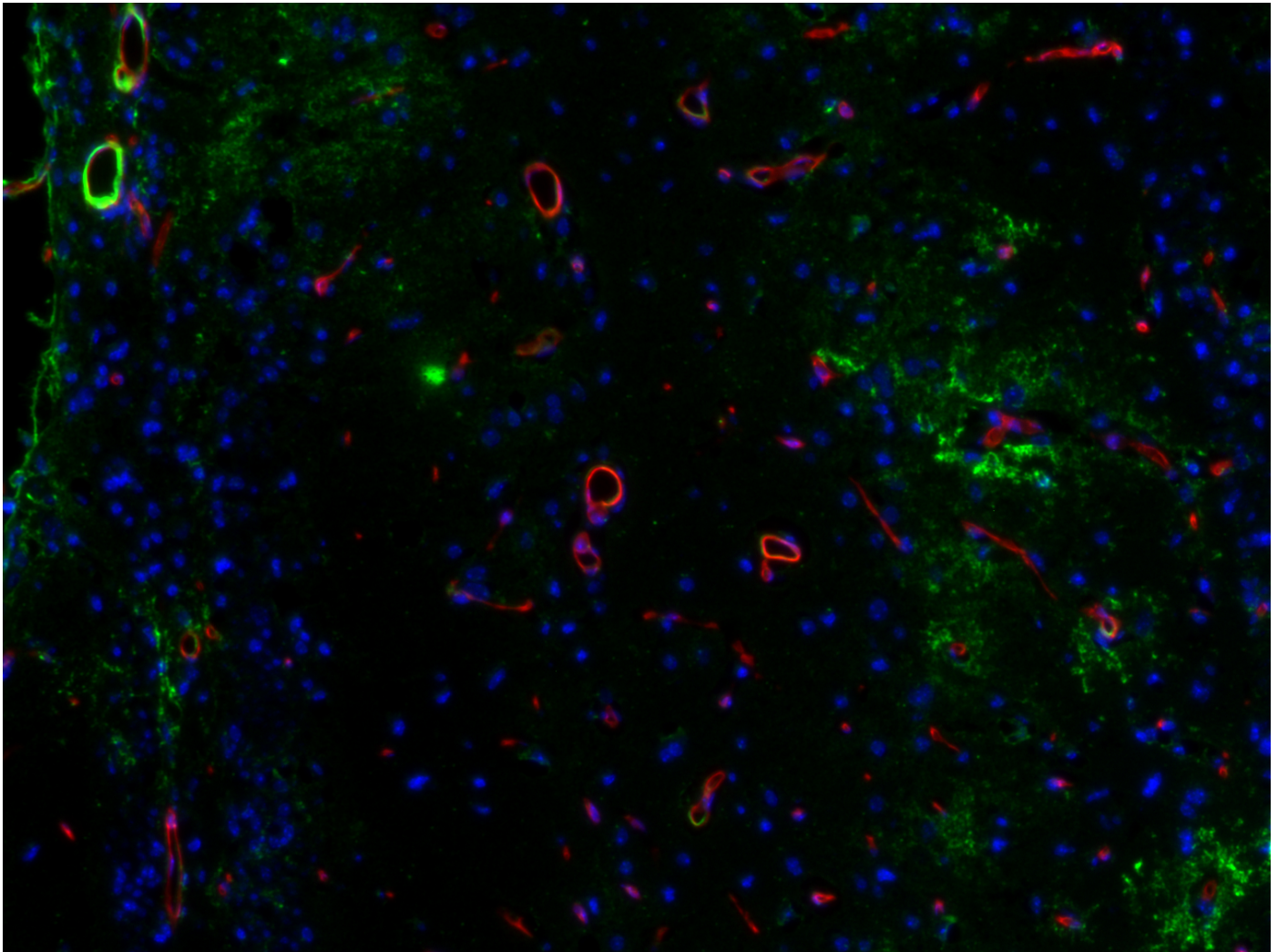
8 GFAP (cat. no. 173 208, 1:500,) (cat. no. 172 004, 1:500,) PFA MCAO 14 B GFAP C DAPI

(Chiareli et al., 2021)

(Kölliker-Frers et al., 2021) CXCL10 CCL2 CXCR2 CCL3 IL-4 IL-6 IL-10 IL-12 OPCs NG2 (Psenicka et al., 2021, Poggi et al., 2023)

Products Astrocytes & Oligodendrocytes in inflammation

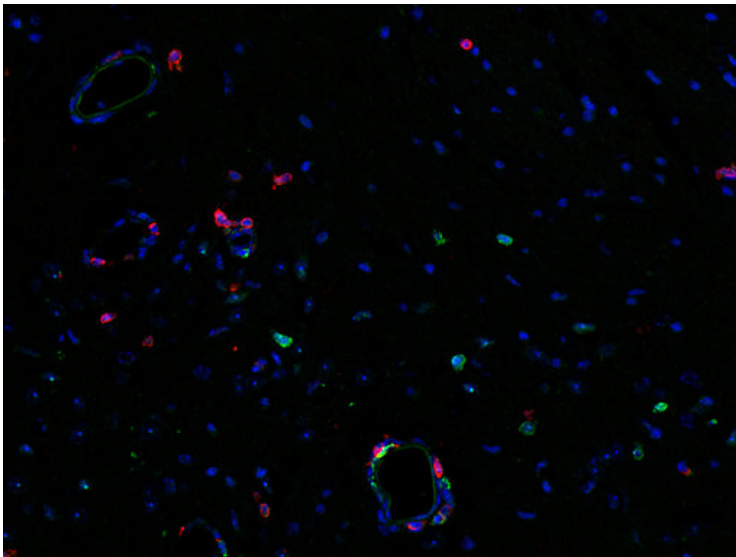
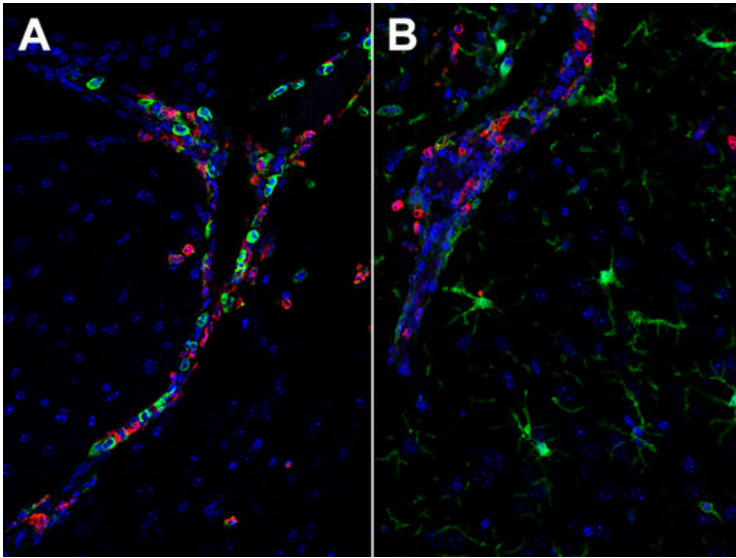
Cat. No.	Product Description	Application	Quantity	Price	Cart
----------	---------------------	-------------	----------	-------	------



12 VCAM1 (cat. no. HS-470 004, 1:750) CD31 (cat. no. HS-351 117, 1:1500) DAPI

Products Blood-brain-barrier (BBB) in inflammation

Cat. No.	Product Description	Application	Quantity	Price	Cart
429 004	Aquaporin4, Guinea pig, antiserum	WB IP ICC IHC IHC-P (FFPE)	100 µl	US\$375.00	
429 006	Aquaporin4, chicken, affinity	ICC IHC	50 µg	US\$385.00	
429 008	Aquaporin4, rabbit, recombinant IgG	IP ICC IHC IHC-P (FFPE) IHC-Fr IHC-G	50 µg	US\$420.00	
429 009	Aquaporin4, chicken, recombinant IgY	IP ICC IHC IHC-P (FFPE) IHC-Fr	50 µg	US\$420.00	
429 011	Aquaporin4, mouse, IgG	IP ICC IHC IHC-P (FFPE) IHC-Fr	100 µg	US\$420.00	
429 011BT	Aquaporin4, mouse, IgG, biotin	ICC IHC IHC-P (FFPE)	100 µg	US\$485.00	
429-0P	Aquaporin4, control protein		100 µg	US\$110.00	
161 002	Caveolin1, rabbit, antiserum	WB IP	200 µl	US\$360.00	
161 003	Caveolin1, rabbit, affinity	WB IP ICC IHC IHC-P (FFPE) IHC-Fr IHC-G	50 µg	US\$460.00	
161 011	Caveolin1, mouse, IgG	WB ICC IHC IHC-P (FFPE) IHC-Fr IHC-G	100 µg	US\$420.00	
161-0P	Caveolin1, control peptide		100 µg	US\$110.00	



14 Chil3^{YM-1} (cat. no. HS-442 017, 1:1500) + CD45 (cat. no. HS-427 008, 1:2000) + B²²⁰-Chil3 (cat. no. HS-442 017, 1:1500) + IBA1 (cat. no. HS-234 008, 1:2000) + SARS-CoV2^{K18-hACE2} + DAPI

15 CD4^T + CD8^T + CD4 (cat. no. HS-360 117, 1:200) + CD8a (cat. no. HS-361 003, 1:250) + DAPI

MDMs^{CCR2} + MDMs + MHCII + MDMs^T (Chang et al., 2021) + MDMs^{IFN} (Spiteri et al., 2022)

CD11c^{1%} + IFN + T (Constant et al., 2022) + moDCs + APCs (Giles et al., 2018)

CD19 (Jain et al., 2021) **MS** (Ahn et al., 2021)

NK (Wang et al., 2023) **NK** (Liu et al., 2021) **NK** (Hao et al., 2010)

Products infiltrating peripheral immune cells

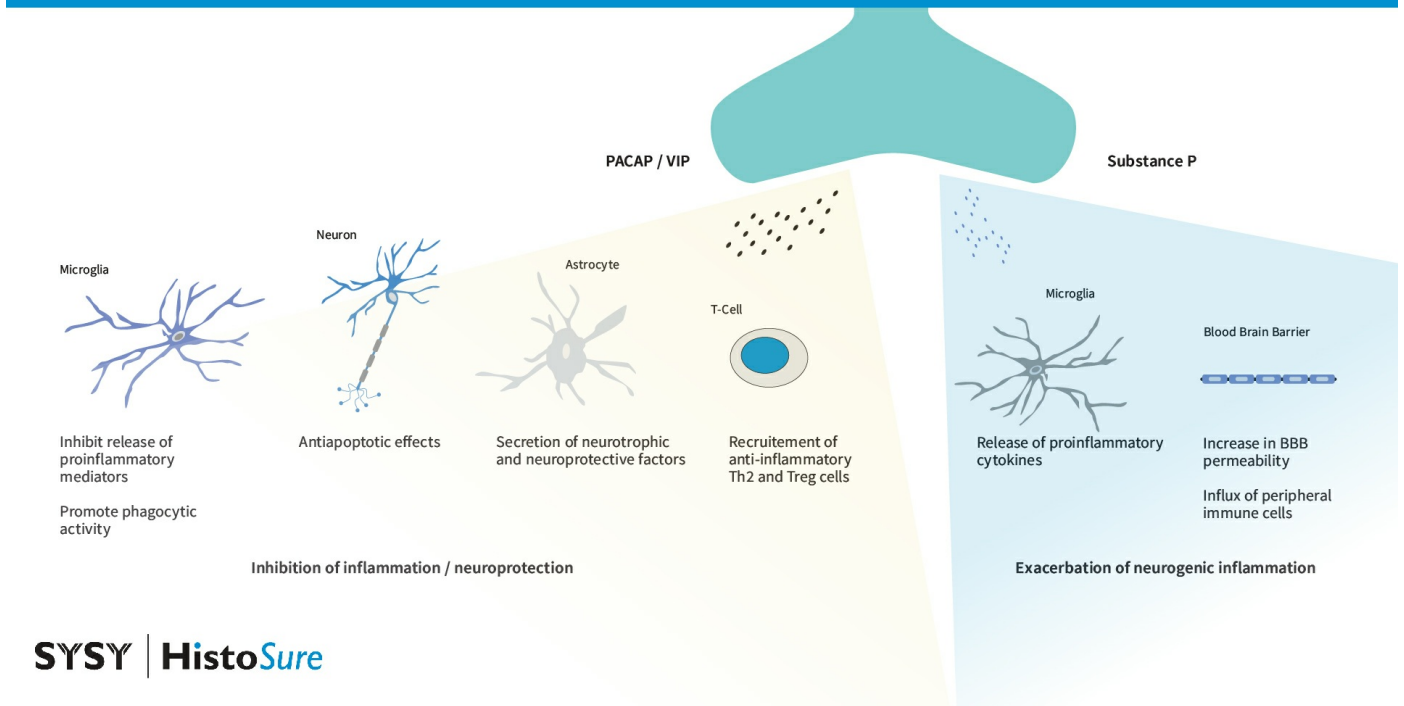
Cat. No.	Product Description	Application	Quantity	Price	Cart
375-0P	CD11c, control peptide		100 µg	US\$110.00	
HS-375 003	CD11c, rabbit, affinity <i>mouse specific</i>	WB IHC IHC-P (FFPE)	200 µl	US\$375.00	
HS-375 004	CD11c, Guinea pig, antiserum <i>mouse specific</i>	WB IHC IHC-P (FFPE)	100 µl	US\$355.00	
HS-375 008	CD11c, rabbit, recombinant IgG <i>mouse specific</i>	IHC IHC-P (FFPE)	50 µg	US\$420.00	
HS-375 013	CD11c, rabbit, affinity	WB IHC IHC-P (FFPE)	50 µg	US\$375.00	
HS-375 017	CD11c, rat, IgG <i>mouse specific</i>	IHC IHC-P (FFPE) IHC-Fr	100 µg	US\$420.00	
HS-439 003	CD19, rabbit, affinity <i>mouse specific</i>	WB ICC IHC IHC-P (FFPE)	200 µl	US\$375.00	
HS-439 008	CD19, rabbit, recombinant IgG <i>mouse specific</i>	IHC IHC-P (FFPE) IHC-Fr	50 µg	US\$420.00	
HS-439 017	CD19, rat, IgG <i>mouse specific</i>	WB IHC IHC-P (FFPE) IHC-Fr	100 µg	US\$420.00	
HS-439 103	CD19, rabbit, affinity <i>human specific</i>	WB IHC-P (FFPE)	50 µg	US\$375.00	
HS-439 108	CD19, rabbit, recombinant IgG <i>human specific</i>	WB IHC-P (FFPE)	50 µg	US\$420.00	
HS-439 117	CD19, rat, affinity <i>human specific</i>	IHC-P (FFPE)	100 µg	US\$420.00	
HS-360 004	CD4, Guinea pig, antiserum <i>mouse specific</i>	WB IHC IHC-P (FFPE)	100 µl	US\$355.00	
HS-360 017	CD4, rat, IgG discontinued, replacement: HS-360 117 <i>mouse specific</i>	IHC IHC-P (FFPE)	200 µl		
HS-360 108	CD4, rabbit, recombinant IgG <i>mouse specific</i>	WB IHC IHC-P (FFPE) IHC-Fr	100 µl	US\$420.00	

Result count: 43

NRV

(Yeo et al., 2022) **16** **CD4** **CD8T** **VIP** **PACAP** **VIP** **MS** (Ganea et al., 2015; Martinez et al., 2019) **VIP** **PACAP** **PACA** (Figueiredo et al., 2022)

Immunomodulatory Roles of Neuropeptides in the Brain



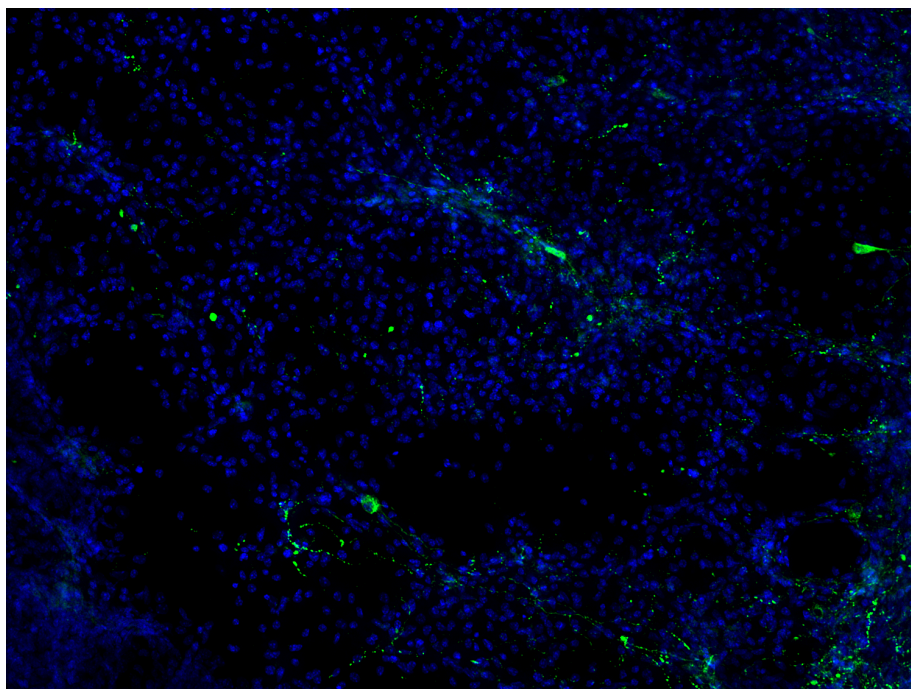
SYSY | HistoSure

16 PACAP/VIP

NPY CRH P (Yeo et al., 2022)

NPY P NPY Aβ AD (Yeo et al., 2022)

(CGRP) P (Carr and Frings, 2019)



17 NPY NPY PFA MCAO14 DAPI

NPY (cat. no. 394 006, 1:500,) PFA MCAO14 DAPI

429 006	Aquaporin4, chicken, affinity	ICC IHC	50 µg	US\$385.00
429 008	Aquaporin4, rabbit, recombinant IgG	IP ICC IHC IHC-P (FFPE) IHC-Fr IHC-G	50 µg	US\$420.00
429 009	Aquaporin4, chicken, recombinant IgY	IP ICC IHC IHC-P (FFPE) IHC-Fr	50 µg	US\$420.00
429 011	Aquaporin4, mouse, IgG	IP ICC IHC IHC-P (FFPE) IHC-Fr	100 µg	US\$420.00
429 011BT	Aquaporin4, mouse, IgG, biotin	ICC IHC IHC-P (FFPE)	100 µg	US\$485.00
429-0P	Aquaporin4, control protein		100 µg	US\$110.00
HS-500 003	Arg-1, rabbit, affinity <i>C-terminal</i>	WB IHC IHC-P (FFPE)	50 µg	US\$375.00
HS-500 013	Arg-1, rabbit, affinity <i>N-terminal</i>	WB IHC IHC-P (FFPE)	50 µg	US\$375.00
HS-500 023	Arg-1, rabbit, affinity	WB IHC-P (FFPE)	50 µg	US\$375.00
161 002	Caveolin1, rabbit, antiserum	WB IP	200 µl	US\$360.00
161 003	Caveolin1, rabbit, affinity	WB IP ICC IHC IHC-P (FFPE) IHC-Fr IHC-G	50 µg	US\$460.00
161 011	Caveolin1, mouse, IgG	WB ICC IHC IHC-P (FFPE) IHC-Fr IHC-G	100 µg	US\$420.00
161-0P	Caveolin1, control peptide		100 µg	US\$110.00

Result count: 177

Christel Bonnas Roser Ufartes

Christel Roser
HistoSure
HistoSure



Christel Roser

Ahn et al., 2021. B Cells in Neuroinflammation: New Perspectives and Mechanistic Insights. [PMID: 34206848](#)

Alghamri et al., 2021. Targeting Neuroinflammation in Brain Cancer: Uncovering Mechanisms, Pharmacological Targets, and Neuropharmaceutical Developments. [PMID: 34084145](#)

Almolde et al., 2015. Alterations in microglial phenotype and hippocampal neuronal function in transgenic mice with astrocyte-targeted production of interleukin-10. [PMID: 25449577](#)

Angiulli et al., 2021. Blood-Based Biomarkers of Neuroinflammation in Alzheimer's Disease: A Central Role for Periphery? [PMID: 34573867](#)

- Benmamar-Badel et al., 2020. Protective Microglial Subset in Development, Aging, and Disease: Lessons From Transcriptomic Studies. [PMID: 32318054](#)
- Beschorner et al., 2007. Expression of EAAT1 reflects a possible neuroprotective function of reactive astrocytes and activated microglia following human traumatic brain injury. [PMID: 17330806](#)
- Carr and Frings, 2019. Neuropeptides in sensory signal processing. [PMID: 30377783](#)
- Chaney et al., 2021. PET Imaging of Neuroinflammation. [doi: 10.1016/B978-0-12-816386-3.00047-8.](#)
- Chang et al., 2021. Divergent Functions of Tissue-Resident and Blood-Derived Macrophages in the Hemorrhagic Brain. [PMID: 33840225](#)
- Chiareli et al., 2021. The Role of Astrocytes in the Neurorepair Process. [PMID: 34113618](#)
- Constant et al., 2022. Role of Dendritic Cells in Viral Brain Infections. [PMID: 35529884](#)
- Dahlmanns et al., 2023. Glial Glutamate Transporter-Mediated Plasticity: System xc-/xCT/SLC7A11 and EAAT1/2 in Brain Diseases. [PMID: 37005761](#)
- Dermitzakis et al., 2023. CNS Border-Associated Macrophages: Ontogeny and Potential Implication in Disease [PMID: 37232741](#)
- Escartin et al., 2021. Reactive astrocyte nomenclature, definitions, and future directions. [PMID: 33589835](#)
- Figueiredo et al., 2022. The neuropeptide PACAP alleviates *T. gondii* infection induced neuroinflammation and neuronal impairment. [PMID: 36403002](#)
- Finger et al., 2022. Age-related immune alterations and cerebrovascular inflammation. [PMID: 34711943](#)
- Ganea et al., 2015. The neuropeptide vasoactive intestinal peptide: direct effects on immune cells and involvement in inflammatory and autoimmune diseases. [PMID: 25422088](#)
- Garcia-Revilla et al., 2022. Galectin-3, a rising star in modulating microglia activation under conditions of neurodegeneration. [PMID: 35859075](#)
- George et al., 2018. Extracellular Matrix and Traumatic Brain Injury. [PMID: 29344975](#)
- Gerganova et al., 2022. CNS border-associated macrophages in the homeostatic and ischaemic brain. [PMID: 35667516](#)
- Giles et al., 2018. CNS-resident classical DCs play a critical role in CNS autoimmune disease. [PMID: 30226829](#)
- Haddadi et al., 2022. Aldolase C Profiling in Serum after Mild Traumatic Brain Injury: A Prospective Cohort Study. [PMID: 35017775](#)
- Hall et al., 2014. Capillary pericytes regulate cerebral blood flow in health and disease. [PMID: 24670647](#)
- Han and Jiang et al., 2020. Evolution of blood-brain barrier in brain diseases and related systemic nanoscale brain targeting drug delivery strategies. [PMID: 34522589](#)
- Hao et al., 2010. Central nervous system (CNS)-resident natural killer cells suppress Th17 responses and CNS autoimmune pathology. [PMID: 20696699](#)
- Higashino et al., 2009. Immunohistochemical analysis of brain lesions using S100B and glial fibrillary acidic protein antibodies in arundic acid- (ONO-2506) treated stroke-prone spontaneously hypertensive rats. [PMID: 19657585](#)
- Hussain et al., 2021. Blood-Brain Barrier Breakdown: An Emerging Biomarker of Cognitive Impairment in Normal Aging and Dementia. [PMID: 34489623](#)
- Jain et al., 2021. B cells in central nervous system disease: diversity, locations and pathophysiology. [PMID: 34903877](#)
- Jäkel and Dimou, 2017. Glial Cells and Their Function in the Adult Brain: A Journey through the History of Their Ablation. [PMID: 28243193](#)
- Jurcau and Simion, 2022. Neuroinflammation in Cerebral Ischemia and Ischemia/Reperfusion Injuries: From Pathophysiology to Therapeutic Strategies. [PMID: 35008440](#)
- Jurga et al., 2020. Overview of General and Discriminating Markers of Differential Microglia Phenotypes. [PMID: 32848611](#)
- Kang et al., 2022. An update on Ym1 and its immunoregulatory role in diseases. [PMID: 35967383](#)
- Kölliker-Frers et al., 2021. Neuroinflammation: An Integrating Overview of Reactive-Neuroimmune Cell Interactions in Health and Disease. [PMID: 34158806](#)
- Liddelow et al., 2017. Reactive Astrocytes: Production, Function, and Therapeutic Potential. [PMID: 28636962](#)
- Lima et al., 2022. Microglial Priming in Infections and Its Risk to Neurodegenerative Diseases. [PMID: 35783096](#)

- Liu et al., 2021. NK Cells in Autoimmune Diseases: Protective or Pathogenic? [PMID: 33777006](#)
- Manda-Handzlik et al., 2019. The Brain Entangled: The Contribution of Neutrophil Extracellular Traps to the Diseases of the Central Nervous System. [PMID: 31766346](#)
- Marchetti and Engelhardt, 2020. Immune cell trafficking across the blood-brain barrier in the absence and presence of neuroinflammation. [PMID: 32923970](#)
- Martinez et al., 2019. A Clinical Approach for the Use of VIP Axis in Inflammatory and Autoimmune Diseases. [PMID: 31861827](#)
- Michalski et al., 2020. Increased Immunosignals of Collagen IV and Fibronectin Indicate Ischemic Consequences for the Neurovascular Matrix Adhesion Zone in Various Animal Models and Human Stroke Tissue. [PMID: 33192578](#)
- Mildenberger et al., 2022. Diversity and function of brain-associated macrophages. [PMID: 35462276](#)
- Pasciuto et al., 2020. Microglia Require CD4 T Cells to Complete the Fetalto-Adult Transition. [PMID: 32702313](#)
- Poggi et al., 2023. NG2-glia: rising stars in stress-related mental disorders? [PMID: 36280754](#)
- Prinz et al., 2021. Microglia and Central Nervous System-Associated Macrophages-From Origin to Disease Modulation. [PMID: 33556248](#)
- Profaci et al., 2020. The blood-brain barrier in health and disease: Important unanswered questions. [PMID: 32211826](#)
- Psenicka et al., 2021. Connecting Neuroinflammation and Neurodegeneration in Multiple Sclerosis: Are Oligodendrocyte Precursor Cells a Nexus of Disease? [PMID: 34234647](#)
- Reid and Kuipers, 2021. She Doesn't Even Go Here: The Role of Inflammatory Astrocytes in CNS Disorders. [PMID: 34539348](#)
- Rothhammer and Quintana, 2015. Control of autoimmune CNS inflammation by astrocytes. [PMID: 26223505](#)
- Sandhu et al., 2021. Astroglial Glutamine Synthetase and the Pathogenesis of Mesial Temporal Lobe Epilepsy. [PMID: 33927688](#)
- Singh, 2022. Astrocytic and microglial cells as the modulators of neuroinflammation in Alzheimer's disease. [PMID: 35978311](#)
- Smolders et al., 2018. Tissue-resident memory T cells populate the human brain. [PMID: 30389931](#)
- Spiteri et al., 2022. Microglia and monocytes in inflammatory CNS disease: integrating phenotype and function. [PMID: 34853891](#)
- Sun et al., 2022. Inflammation From Peripheral Organs to the Brain: How Does Systemic Inflammation Cause Neuroinflammation? [PMID: 35783147](#)
- Takata et al., 2021. Blood-Brain Barrier Dysfunction Amplifies the Development of Neuroinflammation: Understanding of Cellular Events in Brain Microvascular Endothelial Cells for Prevention and Treatment of BBB Dysfunction. [PMID: 34588955](#)
- Tang et al., 2021. Inflammatory neuropsychiatric disorders and COVID-19 neuroinflammation. [PMID: 33926589](#)
- Tohidpour et al., 2017. Neuroinflammation and Infection: Molecular Mechanisms Associated with Dysfunction of Neurovascular Unit. [PMID: 28676848](#)
- Troncoso-Escudero et al., 2018. Outside in: Unraveling the Role of Neuroinflammation in the Progression of Parkinson's Disease. [PMID: 30459700](#)
- Wang et al., 2022. Aquaporin-4 and Cognitive Disorders. [PMID: 35111362](#)
- Wang et al., 2023. Brain endothelial CXCL12 attracts protective natural killer cells during ischemic stroke. [PMID: 36631780](#)
- Webers et al., 2020. The role of innate immune responses and neuroinflammation in amyloid accumulation and progression of Alzheimer's disease. [PMID: 31654430](#)
- Xu et al., 2019. Basement membrane and blood-brain barrier. [PMID: 31338215](#)
- Yang et al., 2019. Neuroinflammatory mechanisms of blood-brain barrier damage in ischemic stroke. [PMID: 30379577](#)
- Yeo et al., 2022. Potentials of Neuropeptides as Therapeutic Agents for Neurological Diseases. [PMID: 35203552](#)
- Zhang et al., 2022. Endothelial caveolin-1 regulates cerebral thrombo-inflammation in acute ischemia/reperfusion injury. [PMID: 36152520](#)