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Anti-Semaphorin-3A (Central region) Antibody

Catalog # AN1943

Product Information

Application	WB, IHC, ICC
Primary Accession	Q14563
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	88889

Additional Information

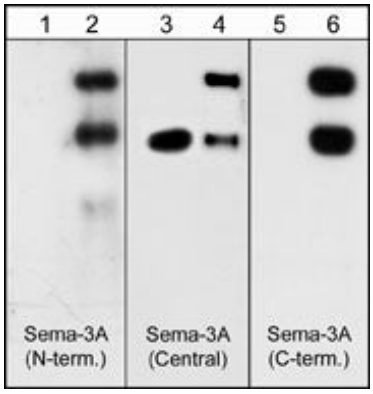
Gene ID	10371
Other Names	Sema3A, Semaphorin III
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Semaphorin-3A (Central region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

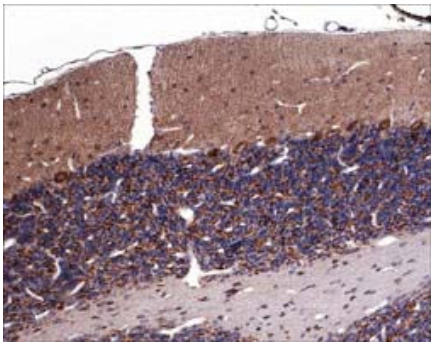
Background

One family of inhibitory axon guidance molecules is the semaphorins. The semaphorins include secreted, transmembrane, and GPI-anchored extracellular molecules that are involved in regulating axon guidance by inhibiting axons from growing toward incorrect targets. Semaphorin 3A (Sema3A) may play a particularly interesting role in limiting axon regeneration since it is expressed in meningeal fibroblasts that invade the injured spinal cord and surround the glial scar. In addition, the Sema3A co-receptors, Neuropilin-1 and Plexin-A1, are expressed on axons that regenerate up to the injured region, but do not cross this Sema3A-containing region. Thus, Sema3A and its co-receptors may have important roles in regulating axon guidance during neuronal development and after neuronal injury.

Images

Western blots of neonatal rat brain (lanes 1, 3 & 5) and human recombinant Sema3A/Fc chimera (95/125 kDa) (lanes 2, 4 & 6). Blots were probed with anti-Sema3A (SP1401) (lanes 1 & 2), anti-Sema3A (AN1943) (lanes 3 & 4) and anti-Sema3A (SP1241) (lane 5 & 6). The antibodies recognize both the 95 kDa and 125 kDa forms of the recombinant Sema3A.





Formalin fixed, citric acid treated parafin sections of adult Rat cerebellum. Sections were probed with anti-Sema3A (AN1943) then anti-Rabbit:HRP before detection using DAB. (Images provided by Carl Hobbs and Dr. Pat Doherty at Wolfson Centre for Age-Related Diseases, King's College London).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.