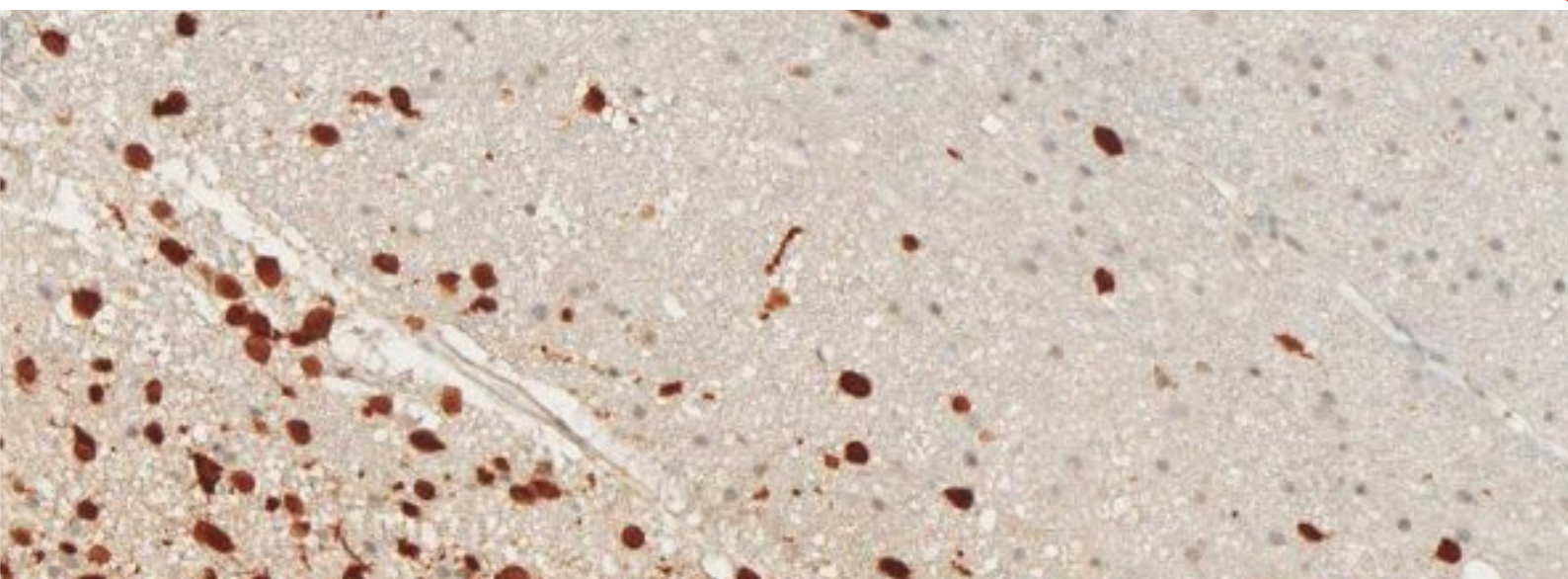


More than 180 Publications

Anti-IDH1 R132H Antibody **clone H09**

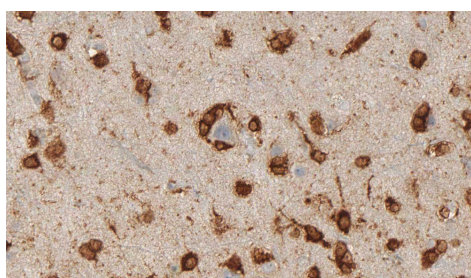
Gold Standard for Precision Diagnosis in Brain Tumors



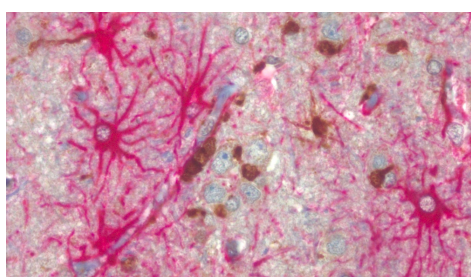
Anti-IDH1 R132H clone H09 and anti-ATRX clone AX1

Clinical Relevance of IDH1 R132H Staining for Brain Tumor Diagnosis

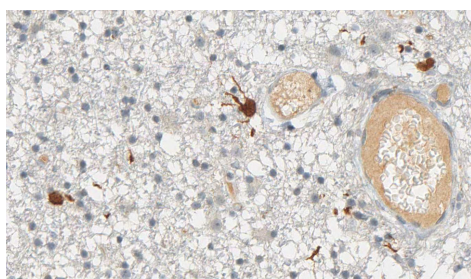
Gliomas are by far the most common brain tumors. Two common types of gliomas are astrocytomas and oligodendrogliomas. Isocitrate dehydrogenase 1 (IDH1) R132H mutations occur in approximately 70% of astrocytomas and oligodendroglial tumors.



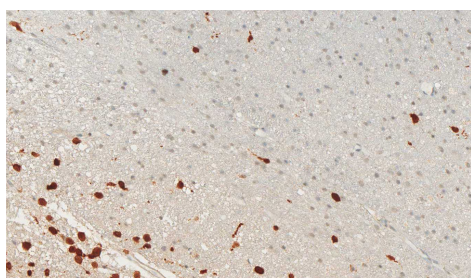
Cortex infiltrated by oligodendroglioma



Double staining of GFP and clone H09



Identification of single tumor cells

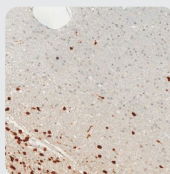


Infiltrating glioma cells

Anti-IDH1 R132H antibody clone H09 aids in the detection of individual cancer cells in the tissue zone surrounding the tumor and in the infiltration zone of diffuse astrocytomas. Moreover, several independent studies have shown that IDH1 R132H mutations in lowgrade and anaplastic gliomas and secondary glioblastomas correlate with favorable patient survival times

About 95% of all IDH1/2 mutations are in IDH1, and among those over 90% are type R132H. This makes an R132H-specific antibody an excellent screening test. The sensitivity and specificity of the anti-IDH1 R132H antibody clone H09 to detect positive tumor cells have been widely demonstrated in several studies.

The strong diagnostic and prognostic implications of IDH1 mutations implicate that routine IDH1 R132H immunostaining needs to be considered as an initial screening method in all gliomas, including suboptimal biopsies suspected of harboring glioma cells. Only in case of a negative staining result (low-grade or anaplastic astrocytoma, oligodendroglioma, oligoastrocytoma or a glioblastoma with oligodendroglial component) direct sequencing for less common IDH1 and IDH2 mutations should be performed.

Anti-IDH1 R132H clone H09 (Ms)		
	Reactivity	Human
	Clone	H09
	Application	IHC-P, WB
SKU	Quantity	Format
DIA-H09	500 µl	conc. (IVD)
DIA-H09-L	7 ml	RTU (RUO)
DIA-H09-SB-01	100 µg	w/o BSA (RUO)

Clone H09 is the benchmark for classification of diffuse Gliomas. Visit our website to find additional information and a link to a list of references.

180+ References

www.dianova.com/IDH1R132H/

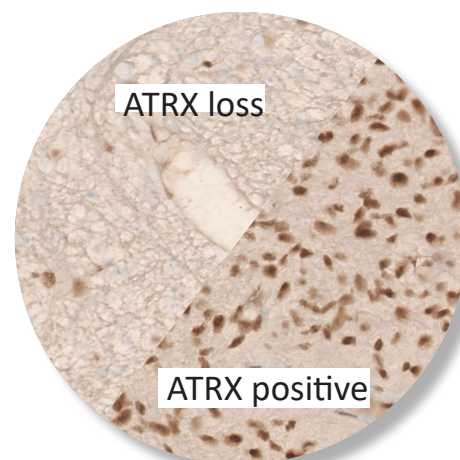
Pictures courtesy of Prof. Dr. med. Andreas von Deimling, Department of Neuropathology, University of Heidelberg / Clinical Cooperation Unit Neuropathology, German Cancer Research Center (DKFZ).

Why Should I Use Anti-IDH1 R132H and ATRX IHC Before Molecular Testing?

The routine practical approach for diagnosing astrocytomas and oligodendrogliomas begins with performing IHC for ATRX and IDH1 R132H expression. Stepwise analysis of molecular parameters with initial IHC for ATRX and IDH1 R132H followed by 1p/19q analysis and then by IDH sequencing significantly reduces the number of molecular tests required for unequivocal diagnosis (Reuss et al., 2015).

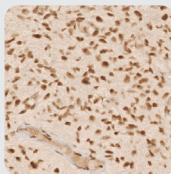
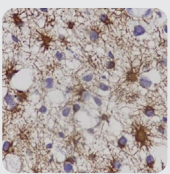
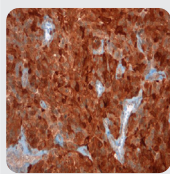
ATRX

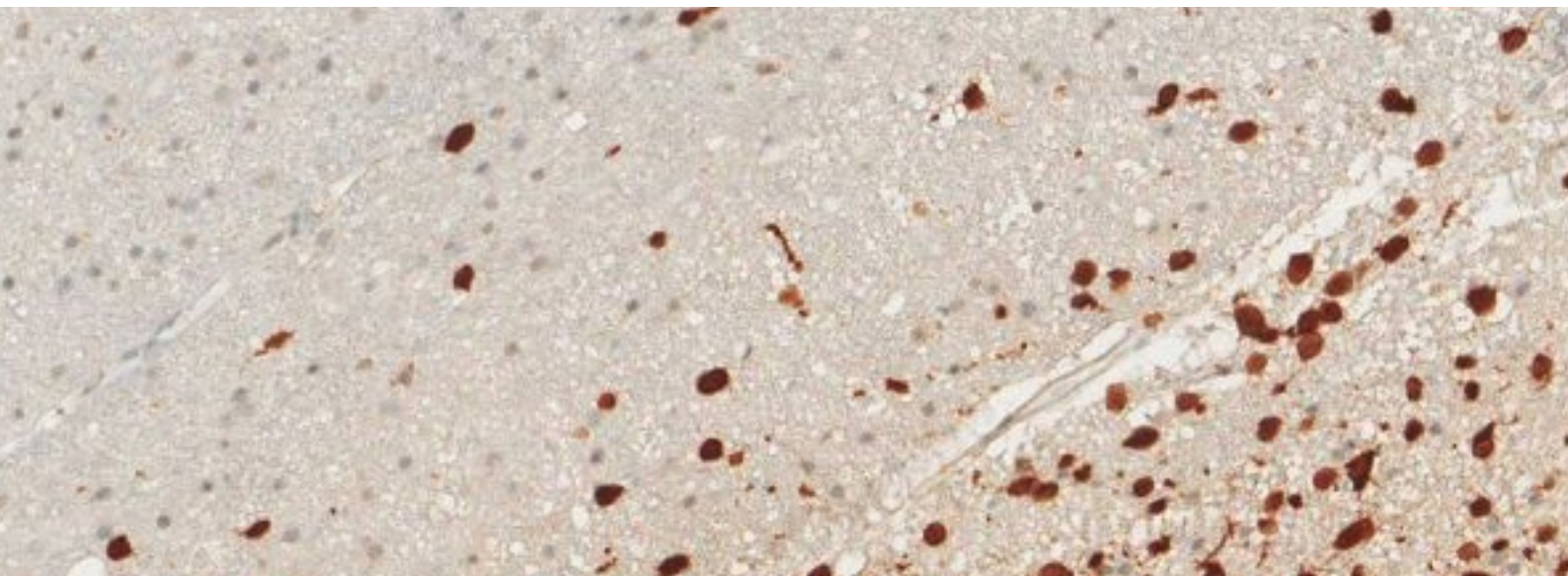
ATRX mutations in gliomas result in the loss of nuclear ATRX expression, which can be diagnosed by IHC. Loss of ATRX expression is close to being mutually exclusive to 1p/19q co-deletion.



Biomarker	Diffuse glioma with IDH mutation & 1p/19q-deletion (oligodendroglioma)	Diffuse glioma with IDH mutation	Diffuse glioma without IDH mutation
IDH1/2	mutated	mutated	wildtype
1p/19q	co-deleted	intact	intact
ATRX	nuclear expression	loss of nuclear expression	nuclear expression
hTERT-Promotor mutations	common	rare	common
Typical histological findings and prognosis			
Histology	oligodendroglial	astrocytic	astrocytic
WHO grading	II or III	II or III (rare IV)	IV (rare II or III)
Median Survival	>15 years	8-12 years	<2-3 years

Anti-ATRX and Other Neuropathology Antibodies

Anti-ATRX clone AX1 (Ms)			Anti-GFAP clone IF3 (Ms)			Anti-IDH1 wildtype clone W09 (Ms)		
	Reactivity	Human		Reactivity	Human		Reactivity	Human
	Clone	AX1		Clone	IF3		Clone	W09
	Application	IHC-P		Application	IHC-P, WB		Application	IHC-P, IHC-F, WB
SKU	Quantity	Format	SKU	Quantity	Format	SKU	Quantity	Format
DIA-AX1	500 µl	conc. (IVD)	DIA-700-P05	500 µl	conc. (RUO)	DIA-W09	500 µl	conc. (RUO)



The BIOZOL brand dianova™ presents a growing selection of premium antibodies available world wide. Highlights are outstanding antibodies for human pathology, that are suitable for standard formalin-fixed paraffin-embedded tissue sections and allow excellent staining results. dianova™ antibodies are developed and validated in close cooperation with leading German pathological institutes.