10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PNR/TAAR5 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58014

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q5QD14
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38220

Additional Information

Gene ID	215854
Other Names	Trace amine-associated receptor 5, TaR-5, Trace amine receptor 5, mTaar5, Trimethylamine receptor, Taar5, Gm227
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Taar5 {ECO:0000303|PubMed:15718104, ECO:0000312|MGI:MGI:2685073}
Function	Olfactory receptor specific for trimethylamine, a trace amine enriched in the urine of male mice, playing a role in social behavior (PubMed:16878137, PubMed:22545963, PubMed:23177478, PubMed:27208093, PubMed:30038239, PubMed:37225986, PubMed:37847527). Also activated by N-methylpiperidine (PubMed:22545963). Trimethylamine is present at high concentration in the urine of male mice after puberty and acts as an attractant (PubMed:16878137, PubMed:23177478, PubMed:37225986). Trimethylamine-binding causes a conformation change that triggers signaling via G(s)-class of G alpha proteins (GNAL or GNAS) (PubMed:37225986). Also required to provide olfactory input into limbic brain areas to regulate emotional behaviors likely via modulation of the serotonin system (PubMed:32194374, PubMed:33132188, PubMed:36038766).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:O14804}; Multi-pass membrane protein {ECO:0000250|UniProtKB:O14804}
Tissue Location	Specifically expressed in neurons of the olfactory epithelium, to discrete

glomeruli predominantly localized to a confined bulb region (PubMed:16878137, PubMed:22837392). Present in the dorsal area of the main olfactory epithelium (PubMed:16878137, PubMed:22837392). Also present in the limbic brain areas receiving projection from the olfactory system and involved in the regulation of emotions (PubMed:33132188, PubMed:36038766). Also expressed in some brain regions outside the olfactory epithelium, such as the hippocampus, cerebellum, cortex, raphe nuclei, hypothalamus, and habenula (PubMed:32194374, PubMed:33132188, PubMed:34845253)

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