

Title: Holoprosencephaly Overview *GeneReview* Table 3

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Note: The following information is provided by the authors listed above and has not been reviewed by *GeneReviews* staff.

Table 3. Summary of Sequence Variations in *ZIC2*

Mutations	Sequence Change	Amino Acid Location	Type of Mutation	Reference
	1 bp del G	7	Frameshift	Brown et al 1998, 2001
	56 bp ins	60	Frameshift	Brown et al 1998, 2001
	1 bp del G	312	Frameshift	Brown et al 1998, 2001
	7 bp del	348	Frameshift	Brown et al 1998, 2001
	2 bp del AG	364	Frameshift	Brown et al 1998, 2001
	1 bp ins C	440	Frameshift	Brown et al 1998, 2001
	30 bp ins	468-478	Alanine expansion ¹	Brown et al 1998, 2001

1. Alanine expansion found in five unrelated individuals

References

Brown SA, Odent S, David V, Blayau M, Dubourg C, Apacik C, Delgado MA, Hall BD, Reynolds JF, Sommer A, Wiczorek D, Brown SA, Muenke M. Holoprosencephaly due to mutations in *ZIC2*: alanine tract expansion mutations may be caused by parental somatic recombination. *Hum Mol Genet.* 2001;10:791–6.

Brown SA, Warburton D, Brown LY, Yu CY, Roeder ER, Stengel-Rutkowski S, Hennekam RC, Muenke M. Holoprosencephaly due to mutations in *ZIC2*, a homologue of *Drosophila* odd-paired. *Nat Genet.* 1998;20:180–3.